

Psychological Abstracts

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EXECUTIVE EDITOR
ALLEN J. SPROW

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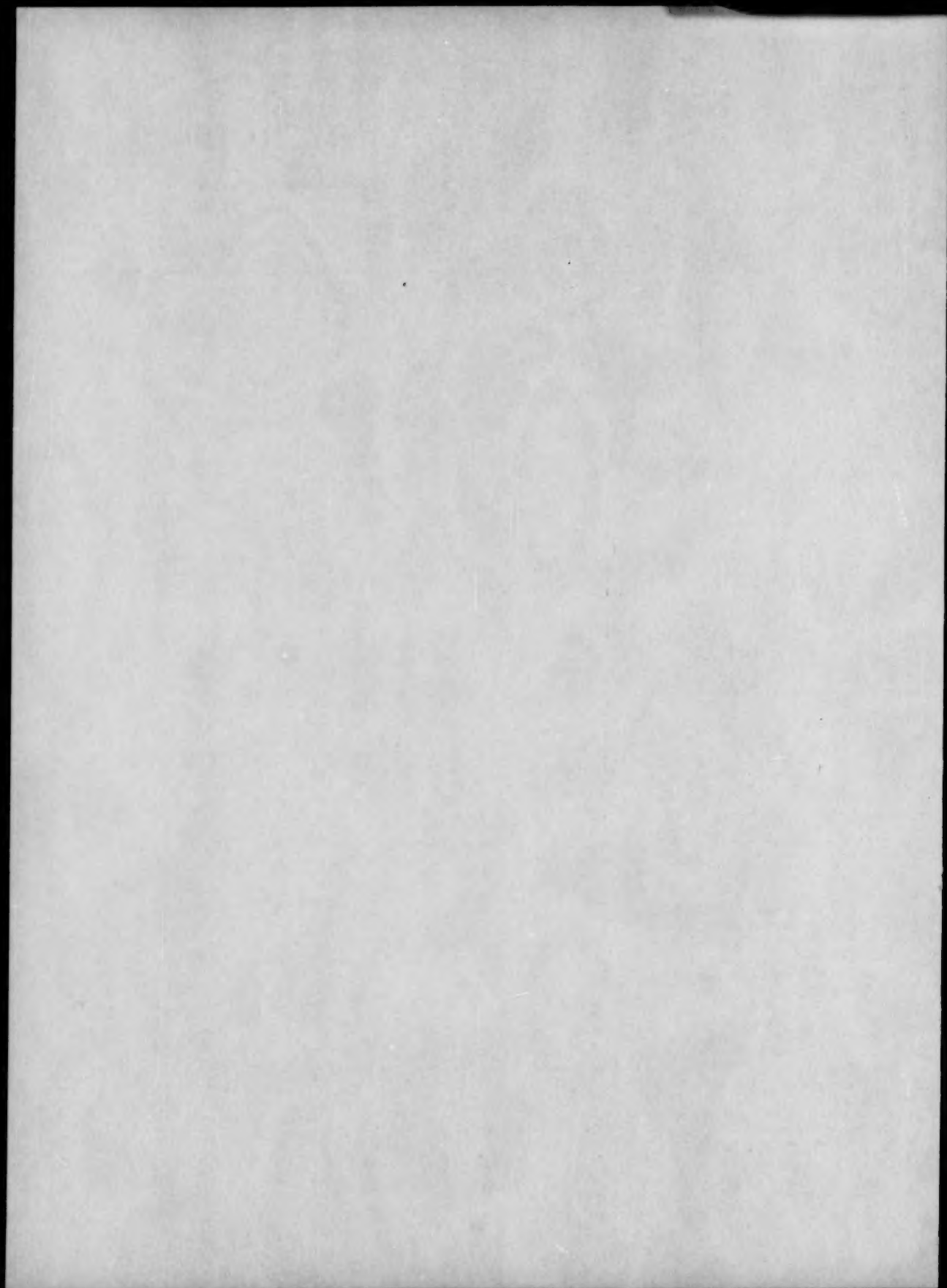
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GENERAL

5233. Bakoš, Ján. (Ed.) *Psychologie d'Ibn Sīnā (Avicenne) d'après son oeuvre Aš-Šifā'*. (The psychology of Avicenna from the *Al Shifa'*). I. Texte arabe. II. Traduction française. Prague: Nakladatelství Československé Akademie Věd, 1956. 270, ix, 245 p. 79 Kčs.—This Arabic text and its French translation consists of the preferred version of Avicenna's several psychological writings. It comprises Book 6 of the work called *Kitab Al Shifa'*. The first five books of this course of philosophical instruction treat of elementary physics, while Books 7 and 8 were intended to complete the study of nature with a discussion of plants and animals. As an orientaling Aristotelian, Avicenna discourses upon the nature of the psyche and its connection with the body, the senses, perception, intellect, memory, and dreams quite after the plan of Aristotle's *De Anima*, but obviously with inverted interpretation.—J. R. Kantor.

5234. Brunswik, Egon. (U. California, Berkeley.) *Historical and thematic relations of psychology to other sciences*. *Sci. Mon.*, N. Y., 1956, 83, 151-161.—"The growing strength of behaviorism has long assured that the core of a procedural physicalism and thus of the essential operational aspects of the unity of science are rapidly becoming a matter of course in psychology. The time has come when unity of science is best served by stressing the thematic differentiation among the sciences within the over-all unity. In carrying this diversification to its logical conclusion, psychology emerges as a macrostatistical discipline, thus acquiring not only distinct thematic identity but also internal methodological unity. The acceptance of this probabilistic functionalism and of the attendant representative design of research may be facilitated, both inside and outside psychology, by a comparative methodology involving sciences of all shadings." 32 references.—S. J. Lachman.

5235. da Silva Mello, A. *Man: his life, his education, his happiness*. New York: Philosophical Library, 1956. 729 p. \$6.00.—This broad survey of modern man and his institutions deals with such diverse topics as the animal basis of human behavior, child development, behaviorism, education, sex, and religion.—P. E. Lichtenstein.

5236. Ehrenwald, Jan. *From medicine man to Freud*. New York: Dell Publishing Co., 1956. 416 p. 50¢.—The 31 selections in this pocket book history of mental healing range from Assyrian tablets to Neo-Freudian theoretical considerations. The anthology is arranged under the following headings: (1) Magic or the quest for omnipotence, (2) Religion or the quest for salvation, and (3) Science or the quest for knowledge and mastery. The editor offers an introduction, provides a running commentary, and concludes with an epilogue.—H. P. David.

5237. Goldbrunner, Josef. *Holiness is wholeness*. New York: Pantheon Books, Inc., 1955. 63 p.

\$1.75.—It shows by examples how depth psychology "can be fruitfully used in the promotion of spiritual health and may prepare the way for the religious life." —D. J. Wack.

5238. Greenwood, David. *Truth and meaning*. New York: Philosophical Library, 1957. xii, 114 p. \$3.75.—6 essays treat the following topics: truth and metalanguage, meaning in natural languages, completeness of the sentential calculus, mathematical definition, the nature of probability statements, and the pragmatic theory of truth.—P. E. Lichtenstein.

5239. Lafitte, Paul. (Melbourne U., Australia.) *The person in psychology: reality or abstraction*. New York: Philosophical Library, 1957. x, 223 p. \$6.00.—This is an examination of the basic position of psychology relative to the sciences, to theory, and to methodology. The author makes explicit the necessity of assumptions in determining any work in the field of psychology, as well as the assumptions behind a number of different approaches. His analysis leads him to believe that psychology is a science in its own right, independent of the natural sciences, but related to the historical sciences.—D. J. Wack.

5240. Lehner, George F. J. (U. California, Los Angeles.) *Explorations in personal adjustment; a guide for self-understanding*. (2nd ed.) Englewood Cliffs, N. J.: Prentice-Hall, 1957. viii, 231 p.—An autobiographical work-book (see 25: 4937) to be used by the student in order to understand himself better. 11 chapters include these areas: family background information, needs and goals; frustrations and conflicts; family, school, social, and vocational adjustment; communication and language; courtship and marriage; use of leisure; mental hygiene and "maladjustment." Self-administered tests are included: an ink-blot, a TAT picture, a personal values questionnaire, a test of social usage, a personality inventory, and a sentence completion test. Suggested readings for each chapter.—F. Costin.

5241. Lonergan, Bernard J. F. *Insight: a study of human understanding*. New York: Philosophical Library, 1957. xxx, 785 p. \$10.00.—The aim of the present work is (1) to examine the nature of knowledge, (2) to treat the content of knowledge "only in the schematic and incomplete fashion needed to provide a discriminant or determinant of cognitive acts," (3) "to set forth a list of the abstract properties of human knowledge but to assist the reader in effecting a personal appropriation of the concrete, dynamic structure immanent and recurrently operative in his own cognitive activities," (4) to offer "not a sudden account of the whole of the structure (of the above mentioned appropriation), but a slow assembly of its elements, relations, alternatives, and implications," (5) to govern the order of the "assembly" "not by abstract considerations of logical or metaphysical priority, but by concrete motives of pedagogical efficacy." —D. J. Wack.

5242. **Mittelman, Maximilien.** *L'homme et son univers.* (Man and his universe.) *Psyché, Paris*, 1954, 9, 319-338; 534-538.—Postulating that man and his universe are inseparable, the author develops the thesis that man can in truth "create" his universe. But this may be only attained if his psychic powers are able to plumb in depth the needs of the whole organism, its delicate functioning and its relationship to its environment. It seems that only now, in the light of relative freedom from want and the unlimited potentialities of science, is this ultimate ambition within the realm of possibility.—*M. D. Stein.*

5243. **Muller, Theresa Grace.** (*U. Nebraska, Omaha.*) *The foundations of human behavior; dynamic psychology in nursing.* New York: G. P. Putnam's Sons, 1956. 254 p.—The course developed in this textbook considers "the fundamental biological and social drives as the motivating forces of human behavior; the ways by which they are modified throughout a lifetime; and some of the psychological theories which contribute to a nurse's understanding of the dynamics of human relationships." Included are a course outline, self test materials, and annotated bibliographies of films, related fiction, and professional resources.—*H. P. David.*

5244. **Nag, Martin, & Smirnov, A. A.** *Streiftog i sovjetrussisk psykologi.* (A glance at Soviet psychology.) *Norsk ped. Tidsskr.*, 1955, 39, 282-294.

5245. **Piaget, Jean.** (*U. Geneva, Switzerland.*) *Some impressions of a visit to Soviet psychologists.* *Amer. Psychologist*, 1956, 11, 343-345.—Piaget and two colleagues, Fraisse and Zazzo, visited psychologists in Moscow and Leningrad and mention "three general impressions which struck us with increasing force." "The first is the importance enjoyed in Moscow by men (and women) of science, independently of their position in the party." "The second is the diversity of individual opinions on a great number of essential questions. . . ." "Our third general impression relates to the objectivity and frankness of our colleagues on the questions we submitted to them for discussion."—*S. J. Lachman.*

5246. **Wilson, John T., Ford, Clellan S., Skinner, B. F., Bergmann, Gustav, Beach, Frank A., & Pribram, Karl.** *Current trends in psychology and the behavioral sciences.* Pittsburgh: University of Pittsburgh Press, 1955. xvi, 142 p. \$4.00.—Each author has contributed one chapter to this symposium. The chapters and authors are: Psychology and behavioral science (J.T.W.); Some potential contributions of anthropology to psychology (C.S.F.); The science of learning and the art of teaching (B.F.S.); Reduction (G.B.); The individual from conception to conceptualization (F.A.B.); and, Toward a science of neuropsychology: method and data (K.P.).—*J. Arbit.*

5247. **Zellinger, Eduard.** *Erkenntnistheoretische und methodologische Betrachtungen zur Psychologie als Wissenschaft.* (Epistemological and methodological considerations of psychology as science.) *Psychol. Rdsch.*, 1956, 7, 124-147.—Psychologists promoting the irrationality of psychological phenomena like to point to modern physics where causality has been supposedly abandoned. Though under the influence of quantum physics causality in its classical meaning does not hold any longer, it has not vanished from physics. A new, stricter definition

must replace the very general former definition, but the principle remains still existing. Moreover irrational psychologists refute themselves by using rational methods in their studies.—*W. J. Koppitz.*

THEORY & SYSTEMS

5248. **Balint, Michael.** *Pleasure, object and libido. Some reflexions on Fairbairn's modifications of psychoanalytic theory.* *Brit. J. med. Psychol.*, 1956, 29, 162-167.—In considering Fairbairn's proposals, it is necessary to remember that what is observed is a two person situation in which gratifications are pre-genital and, even so, very restricted. Also, the therapist's technique will determine in part what is observed. That libido is object-seeking is accepted but this does not require rejection of the pleasure-seeking quality of libido. Too little attention is accorded the problem of "the observer's parallax."—*C. L. Winder.*

5249. **Ellis, Albert.** *An operational reformulation of some basic principles of psychoanalysis.* *Psychoanal. Rev.*, 1956, 43, 163-180.—Many of the basic Freudian hypotheses are quoted verbatim and then restated in more operational, observational, and intervening-variable terminology. 53 references.—*D. Prager.*

5250. **Farber, Leslie H.** *Martin Buber and psychiatry.* *Psychiatry*, 1956, 19, 109-120.—This contribution states that none of the competing systems in the young science of psychiatry has constructed a way of life nor makes such a claim. Man's humanity is readily obscured by theoretical constructs, while in his work the psychiatrist needs a full human concept. The author suggests the *I-Thou* and *I-It* theories of Martin Buber, psychologist and historian. These are related to the interpersonal theories of Sullivan, particularly of schizophrenic isolation and of superficial social intimacy. The author hopes that the psychiatrists will turn back to the theologians some of the ethical responsibility which has been thrust upon them.—*C. T. Bever.*

5251. **Grégoire, François.** *La nature du psychique.* (The nature of the psychic.) Paris, France: Presses Universitaires de France, 1957. 131 p. 240 fr.—The "psychic activity" has been "the center and the crossroad of all philosophy" through the ages. The writer does not offer a solution of this problem, but traces the development of thought on the question.—*J. G. Pratt.*

5252. **Guntrip, H.** *Recent developments in psychoanalytical theory.* *Brit. J. med. Psychol.*, 1956, 29, 82-99.—Classical Freudian theory is reviewed. Deficiencies in terms of Helmholtzian separation of energy from structure and the mixing of biological and psychological constructs are noted. Horney and Fromm are noted as incomplete sociologically oriented theorists who present the interpersonal antithesis to the instinct theory. The progression beyond is said to be the work of Klein and Fairbairn, especially the latter. "The elaboration in Great Britain of a different theoretical orientation which, while not indifferent to sociological and biological considerations, developed the concepts of the 'internal object' and the 'inner psychic world' as parallel to external objects and the outer world, and so comes to correlate the internal and the external object-relationships in which

the personality is involved." 35 references.—C. L. Winder.

5253. Kardos, Elizabeth, & Peto, Andrew. **Contributions to the theory of play.** *Brit. J. med. Psychol.*, 1956, 29, 100-112.—"We think that the most basic function of play is anchored in the second phase of Freud's defusional-fusional process, it represents the 'flooding with libido,' when the ambiguous effect of neutralization has to be overcome in order to save the ego from freed aggression of the first phase. . . . Depersonalization represents the archaic pattern of losing the object . . . play represents the effort of finding and integrating this object." 20 references.—C. L. Winder.

5254. Lavi, Zvi. **Ketsad marksistim m'vakrim hayom et hapsihoanaliza.** (How Marxists criticize presentday psychoanalysis.) *Ofakim*, 1956, 10, 242-245.—The changes in the U.S.S.R. in the thirties were an important turning-point in the discussion of the relation between Marxism and psychoanalysis. Thus, papers are analysed, which were published in the Marxist quarterly *Science and society* in 1954-55, in order to show that the problem exists, and that its proper treatment is necessary.—H. Ormian.

5255. Maslow, Paul. **Intuition versus intellect.** Valley Stream, N. Y.: Life Science Press, 1957. xi, 240 p. \$4.50.—"The genetic realities [Jungian] incorporated into the imperishable life-stream constantly, collectively and unknowingly fashion the individual's personality, shape his human nature, develop his temperament and otherwise influence his current state of mind." Now such genetic factors are really dangerous to man's future and it is necessary that there be some kind of "subjective revolution" to change man from thing-minded to human minded.—R. A. Littman.

5256. Michigan. University. **Mental Health Research Institute. Orientation systems.** *Behav. Sci.*, 1956, 1, 231-244.—A discussion of the question of the feasibility of studying orientations (attitudes) in the light of their inherent structure and dynamics. The role of orientations in behavior theory, as logical constructs, as systems, etc., is discussed.—J. Arbit.

5257. Money, John. (Johns Hopkins. Sch. Med., Baltimore, Md.) **Mind-body dualism and the unity of bodymind.** *Behav. Sci.*, 1956, 1, 212-217.—A resolution of the problems arising from a mind-body dualism by conceiving mind as the information and communication function of the human organism. Certain functions of this mind, or ego, are discussed and the variables affecting these functions are noted.—J. Arbit.

5258. Murphy, Gardner. (Menninger Foundation, Topeka, Kans.) **Toward a dynamic trace-theory.** *Bull. Menninger Clin.*, 1956, 20, 124-134.—The question is considered "whether our psychological system has . . . a place for memory materials which are, aside from the push of the instinct, dynamically active, that is, materials which have a tendency to return to the conscious-preconscious system. Or are we dealing only with traces . . . ?" Experimental studies in psychology and neurology indicate that the dynamic conception is closer to the truth. Instincts or instinctual residues in the psychoanalytic sense "are simply vivid exemplars of a very general tendency to energy release and redistribution, in which

the sensory and motor systems are as important as the visceral."—W. A. Varvel.

5259. Natanson, Maurice. **The social dynamics of George H. Mead.** Washington: Public Affairs Press, 1956. vii, 102 p. \$2.50.—Mead's theory of social reality is summarized and examined critically. The author emphasizes the radical implications of Mead's thought for philosophy and the social sciences.—P. E. Lichtenstein.

5260. Neumann, Johannes. **Kritische Bemerkungen zur Individualpsychologie.** (Critical remarks on individual psychology.) *Psychol. Rdsch.*, 1954, 5, 185-195.—This is the author's preface to his book on the nervous character and its treatment. According to him, Adler has built his psychology on his own type which he considered as the normal one. He did not recognize that other types existed.—M. J. Stanford.

5261. Osgood, Charles E. (U. Illinois, Urbana.) **Behavior theory and the social sciences.** *Behav. Sci.*, 1956, 1, 167-185.—A rather general overview of the history and principles of learning theory. The insufficiencies of single-stage S-R models are noted and a 2-stage model based upon a representational mediation process is proposed. This 2-stage model is applied to certain aspects of social behavior, e.g., stereotyping and identification. 15 references.—J. Arbit.

5262. Pavlov, I. P. **Experimental psychology and other essays.** New York: Philosophical Library, 1957. 653 p. \$7.50.—This is a collection of reprints, abstracts, letters and extracts from stenographic records of Pavlov's seminars. The subject matter ranges from problems of neural factors in blood circulation and the physiology of digestion to comments on physiology and psychiatry. There is a 4-page bibliography and a 32-page introduction by Kh. S. Koshtoyants. 3 portraits of Pavlov are reproduced.—L. I. O'Kelly.

5263. Pavlov, I. P. **Lektsiia bol'nym Obukhovskoi bol'nitsy.** (Lecture to the patients of Obukhovskaia Hospital.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6(1), 3-7.—A previously unpublished lecture by Pavlov, reconstructed through notes and memory by P. S. Kupalov.—I. D. London.

5264. Ramzy, Ishak. (Menninger Foundation, Topeka, Kans.) **From Aristotle to Freud: a few notes on the roots of psychoanalysis.** *Bull. Menninger Clin.*, 1956, 20, 112-123.—Psychoanalysts have been reluctant to make the necessary contact with other systems of science and human knowledge and to consider the historical roots of their own theory. The "documented landmarks in Freud's academic background" suggest the special importance of Schelling's "philosophy of nature," of Brucke's evolutionistic orientation and stress upon a physical physiology (Helmholtz), of Aristotle's doctrines as represented in Brentano, and of Freud's translations of some of J. S. Mill's essays.—W. A. Varvel.

5265. Sewell, William H. (U. Wisconsin, Madison.) **Some observations on theory testing.** *Rur. Sociol.*, 1956, 21, 1-12.—"The need for empirical testing of theory is particularly great in the social sciences, where the body of theory is burdened with a number of widely accepted but empirically unconfirmed theories which serve as unilateral explanations of

complex social behavior. Such theories have come in many instances to have doctrinal status and, so long as they remain unchallenged by empirical testing, are likely to defy modification and change." Problems in the testable formulation of such theories, research design and confirmation are discussed and illustrated with the author's testing of Freud's idea of infantile sexuality which, incidentally, failed of confirmation.—H. K. Moore.

5266. Simon, Herbert A. (Carnegie Inst. Tech., Pittsburgh, Pa.) **A comparison of game theory and learning theory.** *Psychometrika*, 1956, 21, 267-272.—"It is shown that Estes' formula for the asymptotic behavior of a subject under conditions of partial reinforcement can be derived from the assumption that the subject is behaving rationally in a certain game-theoretic sense and attempting to minimize his regret. This result illustrates the need for specifying the frame of reference or set of the subject when using the assumption of rationality to predict his behavior."—M. O. Wilson.

5267. Smith, Nicholas M., Jr. (Operations Res. Off., Johns Hopkins U., Baltimore, Md.) **A calculus for ethics: A theory of the structure of value. Part I.** *Behav. Sci.*, 1956, 1, 111-142.—"... a theory of values based upon a stochastic model of a system. Value is associated with the state of a system. The value of the state is defined as the sum of values of future states multiplied respectively by the probability of reaching them... a method is derived for computing cost of things and effectiveness of processes which obtain them. Value postulates are developed for immortal and mortal systems, and various means of resolving conflicts in decision among values are considered." 29 references.—J. Arbit.

5268. Smith, Nicholas M., Jr. (Johns Hopkins U., Baltimore, Md.) **A calculus for ethics. A theory of the structure of value. Part II.** *Behav. Sci.*, 1956, 1, 186-211.—"... a theory of values based upon a stochastic model of a system. Several ethical systems... are discussed in terms of this theory and finally an underlying and unifying rational principle is proposed, the principle of *analogical conformity*. It asserts that all rational forms, including many laws of various natural and social sciences as well as ethical principles, are homomorphic to a general form. This form is a generalization of probability theory." (See 31: 5267.)—J. Arbit.

5269. Szasz, Thomas S. **Is the concept of entropy relevant to psychology and psychiatry?** *Psychiatry*, 1956, 19, 199-202.—"The transformation of the meaning of entropy from thermodynamics to psychiatry is traced. The view is advanced that the concept of entropy cannot be meaningfully applied to describe changes in the psychological organization of a system."—C. T. Bever.

5270. von Bertalanffy, Ludwig. **General system theory.** In Taylor, Richard W. (Ed.), *Life, language, law: Essays in honor of Arthur F. Bentley*. Yellow Springs, O.: The Antioch Press, 1957. pp. 58-78.—"Viewing the general tendency towards integration in the various sciences, natural and social, which seems to be centered in a general theory of systems, it is proposed that such a general systems theory may be an important means for aiming at exact theory in the non-physical fields of science. De-

veloping unifying principles running "vertically" through the universes of the individual sciences may bring us nearer to the goal of the unity of science and lead to a much-needed integration in scientific education. General System Theory is illustrated by way of such examples as closed and open systems in physics, information and entropy, and causality and teleology."—L. N. Solomon.

5271. Zellinger, Eduard. **Die Lehre Kurt Lewins im Vergleich zu einer "horizontalen" und vertikalen Psychologie.** (Kurt Lewin's theory compared to a "horizontal" and vertical psychology.) *Psychol. Rdsch.*, 1954, 5, 177-184.

(See also abstracts 5398, 5952)

METHODS & APPARATUS

5272. Ackner, Brian. (Maudsley Hosp., London, Eng.) **A simple method of recording respiration.** *J. Psychosom. Res.*, 1956, 1, 144-146.—"The mercury-in-rubber strain gauge is described along with the technical difficulties in filling the tube and in maintaining optimal operation. A simple method of filling the tubing thereby maintaining "perfect electrical contact with the electrodes" is described and diagrammed."—L. A. Pennington.

5273. Black, A. H., & Solomon, R. L. (Harvard U., Cambridge, Mass.) **A method for continuously measuring the position of a rat in a runway.** *Amer. J. Psychol.*, 1956, 69, 296-299.—"The apparatus is based on the design of the simple scale beam. The runway is placed on one side of the beam's fulcrum and a set of counterweights on the other, with the runway-end suspended on a coil spring." A kymograph attachment makes possible a record of the animal's activity.—R. H. Waters.

5274. Brogan, F. A. **A discrete-frequency automatic audiometer simulating manual technic.** *USAF Sch. Aviat. Med. Rep.*, 1956, No. 56-123, 12 p.—"An automatic audiometer is described which utilizes discrete frequencies, offers 1-second tones at random, and simulates manual audiometry. The time required for testing both ears is approximately 5 minutes for 5 frequencies. Present equipment can test up to 12 frequencies. The intensity range utilizing IBM recording equipment is 55 db, but this range can easily be extended an additional 30 db without changing the test time. All types of recording equipment may be utilized in conjunction with the basic unit. A unique feature of this equipment is that it prevents the subject from directly controlling the test results. Each response is evaluated for correlation with the test stimulus." 34 references.

5275. Cervin, Vladimir (U. Toronto, Can.), & Cervinka, Bohdan. **A micropolygraph.** *Amer. J. Psychol.*, 1956, 69, 300-302.—"The design of a combination wrist-watch and multiple-recording device is presented. This micropolygraph "when manufactured" will have certain advantages, small size and better control of irrelevant variables from the apparatus, over existing polygraphs."—R. H. Waters.

5276. Cochran, William G., & Cox, Gertrude M. **Experimental designs.** (2nd ed.) New York: John Wiley & Sons, 1957. xiv, 611 p. \$10.25.—In this edition (see 24: 5597), new material has been added where necessary to fulfill the original objective of making available the types of designs likely to be

most useful. The 2 chapters added deal with factorial experiments in fractional replication and some methods for the study of response surfaces. The appearance of several series of new incomplete block designs necessitated expansions in some of the later chapters. To cover other developments, a number of sections has been added. References have been brought up-to-date.—*A. J. Spross.*

5277. **Davies, Philip W.** (*Johns Hopkins U., Baltimore, Md.*) **Chamber for microelectrode studies in the cerebral cortex.** *Science*, 1956, 124, 179-180.—Although designed to facilitate reliable electrophysiological study of the cortex including recording action potentials from single cells, the instrument might be "useful . . . in such fields as chick-embryo work (with shell intact), tissue-culture work in general, or in physics and engineering where micromanipulations in vacuum chambers are necessary." A description of the apparatus and a diagram are provided.—*S. J. Lachman.*

5278. **Deterline, William A.** (*U. Pittsburgh, Pa.*) **An automatic device for the investigation of operant behavior in fish.** *Amer. J. Psychol.*, 1956, 69, 291-295.—The apparatus described and illustrated is suitable for the study of operant learning and operant discrimination. Illustrative data are reported.—*R. H. Waters.*

5279. **Feibleman, James K.** (*Tulane U., New Orleans, La.*) **Mathematics and its applications in the sciences.** *Phil. Sci.*, 1956, 23, 204-215.—"A mathematical system consists [of] undefined terms combined in a set of axioms from which theorems are deduced by means of appropriate rules of inference, enriched with definitions and lemmas." The axioms derive from sense data. Hence, mathematics has relevancy to empirical structure, and the latter can be expressed in terms of the former. Axioms are sought from which further theorems can be deduced which will accord with observation. Science quantitatively describes the qualitative. "We need to develop a technique for the qualitative analysis of qualities. . . ."—*H. Rujia.*

5280. **Fischer, Hardi.** **Die modernen pädagogischen und psychologischen Forschungsmethoden; eine Einführung.** (Modern methods of research in pedagogics and psychology; an introduction.) Göttingen, Germany: Verlag für Psychologie, 1957. 104 p. DM 9.80.—Modern pedagogics and psychology, although value-directed, are not based on speculative ideas but on objective facts. These sciences make increasingly use of the experimental and quantitative methods which were developed in the Anglo-Saxon countries. Statistics and tests must be considered as the most important tools. Arrangements will have to be made for laboratories and experimental classes. The discussion of the various types of tests, methods and planned experiments is followed by a statistical appendix. 70 references.—*M. Haas.*

5281. **Ham, George C.** **The development of concepts and methods.** *Psychiat. Res. Rep.*, 1956, No. 3, 67-73.—Various definitions and viewpoints held at different historical periods are reviewed. The conclusion is drawn that "psychodynamics alone or physiological measurements alone . . . give us a partial picture. These must be related [together] to the organism. . . ."—*L. A. Pennington.*

5282. **Isaac, Walter, & Ruch, Theodore C.** (*U. Washington, Seattle.*) **Evaluation of four activity techniques for monkeys.** *Science*, 1956, 123, 1170.—"On the basis of the reliability coefficients, there is little choice between these four techniques for measuring the spontaneous activity of a monkey." A technique involving use of "the electric-eye was judged best for recording cage activity by a monkey."—*S. J. Lachman.*

5283. **Jeffrey, Richard C.** (*Princeton U., N. J.*) **Valuation and acceptance of scientific hypotheses.** *Phil. Sci.*, 1956, 23, 237-246.—According to Rudner (see 27: 6247), the scientist makes value judgments since he rejects and accepts hypotheses. Jeffrey maintains that the acceptance of a hypothesis depends on the specific action it is intended to guide. Since the same hypothesis may be appropriate to a number of different situations having different values, the scientist, who can not anticipate all such situations, can not declare once and for all whether a hypothesis is to be accepted or rejected. Rather, he only assigns probabilities. Those who are to be guided by a given hypothesis may accept or reject it in relation to the utilities involved in the specific situation. Comments by C. West Churchman, pp. 247-249.—*H. Rujia.*

5284. **König, Gisela.** **Vorschlag einer neuen Dokumentationsmethode in der psychologischen Forschung und Praxis.** (Proposal of a new method of documentation in psychological research and practice.) *Psychol. Rdsch.*, 1956, 7, 10-16.—The method proposed for documentation of psychological data and the quick separation of all people with the trend under investigation is in principle the same as the McBee Key-Sort method used widely in the USA.—*W. J. Koppitz.*

5285. **Millichap, J. Gordon.** (*NIH, Bethesda, Md.*) **Methods of evaluation of new anticonvulsant compounds.** *Neurology*, 1956, 6, 484-490.—New drugs with supposed anti-convulsant properties should be tested by both laboratory and clinical trials before they are released. Laboratory tests, on sub-human animals, should show inhibition of metrazol- or electroshock-induced seizures. Clinical tests should include evaluation of toxic effects, side-reactions and efficacy for specific types of seizure pattern. Controls and testing procedures are discussed.—*L. I. O'Kelly.*

5286. **Reese, William G.** (*U. Arkansas, Little Rock.*) **Comments on methodology.** *Psychiat. Res. Rep.*, 1956, No. 3, 89.—The view is expressed that by virtue of the diverse opinions among those of related disciplines, communication may for the time being be impossible. A return to psychophysiological studies of the mother-child unit is suggested as worthwhile in the field of psychosomatic medicine.—*L. A. Pennington.*

5287. **Schmidt, Theo.** **Equipment for objective determination of visual acuity according to Goldmann.** *Amer. J. Ophthal.*, 1956, 42, 123-126.—A testing board which may be used to elicit optokinetic nystagmus as a method of testing acuity objectively is described.—*D. Shaad.*

5288. **Skinner, B. F.** (*Harvard U., Cambridge, Mass.*) **A case history in scientific method.** *Amer. Psychologist*, 1956, 11, 221-233.—The case history in

scientific method cited is autobiographical; Skinner relates certain relevant experiences in the development of some of his scientific contributions.—S. J. Lachman.

(See also abstracts 5326, 5450)

NEW TESTS

5289. **Aliferis, J. Music achievement test.** One form. Collage freshmen. 40 minute tape, or may be played on piano by administrator. Minneapolis, Minnesota: University of Minnesota Press, 1954.—Provides a measure of the ability to select from musical notation items heard played on the piano. Melodic, harmonic, rhythmic, and total scores are provided. 28-page manual furnishes correlations with grades in college courses, subtest intercorrelations, Kuder-Richardson reliability data, an item analysis, and T-score and percentile norms for entering freshmen by type of college and geographical location.—R. L. McCornack.

5290. **American Association of University Professors. A Local Chapter Committee. The faculty morale scale.** One form, untimed, adults, group. Test (\$7.50 per 100), specimen set (\$1.00 with test, key, manual). Chicago, Ill.: Psychometric Affiliates, 1954.—A 34 item Lickert-type scale of attitudes toward a college teaching position. 4-page manual presents Spearman-Brown reliability, correlation of rank with morale scores, and norms for a private mid-western university and for a group of professors taken from a national list.—R. L. McCornack.

5291. **American Civil Liberties Union. Illinois Division. Academic Freedom Committee. Academic freedom survey.** Test (\$3.00 per 100), specimen set (\$1.00 with test, key, manual, and ACLU brochure). Chicago, Ill.: Psychometric Affiliates, 1954.—An attitude scale containing 23 items on the rights of teachers, students, and non-academic school employees. 4-page manual presents item-total correlations, Spearman-Brown reliability, and both faculty and student norms for two Illinois private colleges.—R. L. McCornack.

5292. **Bennett, George K. Test de compréhension mécanique.** (Test of mechanical comprehension.) Form AA-F. New York: The Psychological Corp., 1955.—A French and English form in which the pictures are identical, but the questions and directions are in both French and English. Manual is unchanged except that a one-page supplement on validity has been added as of 1954.—R. L. McCornack.

5293. **Bennett, G. K., & Belink, Marjorie. Short employment tests.** Four forms, adult, 15 minutes. Verbal, numerical or clerical test booklets (\$1.60 per 25 with manual, pp. 11, and key), specimen set (\$.35). New York: Psychological Corporation, 1956.—A series of three aptitude tests intended to be used by employers of office help. Verbal, numerical, clerical and total scores available. Manual presents 19 validity studies, equivalent form and retest reliabilities, subtest intercorrelations, correlations with other tests, and percentile norms for various clerical occupations by sex.—R. L. McCornack.

5294. **Bernberg, R. E. A measure of social conformity.** One form, group, untimed, adult. Test (\$7.50 per 100), specimen set (\$1.00 for manual,

test, key). Chicago, Ill.: Psychometric Affiliates, 1954.—A disguised measure of social conformity in the following areas: moral values, positive goals, reality testing, ability to give affection, tension level, and impulsivity. Normative data on various penal groups, police officers, regular church goers, and high school and college students are given in the manual. Spearman-Brown reliability and validity data obtained by contrasting above groups are given in the Manual.—R. L. McCornack.

5295. **Brown, W. F., & Holtzman, W. H. Brown-Holtzman survey of study habits and attitudes.** One form, high school and college, untimed, 20 minutes. Reusable booklets (\$2.00 per 25), answer sheets (\$1.85 per 50), manual, pp. 11, and scoring keys (\$.50), specimen set (\$.60). New York: The Psychological Corporation, 1956.—A measure of study methods, motivation for studying, and certain attitudes toward scholastic activities important in the classroom, for use in screening, diagnosis, research and as a teaching aid. Manual includes college and high school percentile norms by sex, split-third and retest reliabilities, and concurrent validity with course grades and average grades.—R. L. McCornack.

5296. **California Test Bureau. California tests in social and related sciences.** Elementary, grades 4-8, and advanced, grades 9-12. Two forms for each. 170 minutes for each. Either battery of tests (\$7.70 per 35 with manual, scoring key, and class record sheet), hand-scoring answer sheets (\$2.45 per 35), I. B. M. answer sheets (\$1.40 per 35). Specimen set, either level (\$.75). Los Angeles, California: California Test Bureau, 1953.—The Elementary battery is a revision of the Progressive Tests in the Social and Related Sciences. All tests separately available. Coverage indicated by test names: The American Heritage, People of Other Lands and Times, Geography, Basic Social Processes, Health and Safety, and Elementary Science. Manual, 24 p., presents Kuder-Richardson reliability, content validity information, percentile by grade norms, and the fact that 90% of students finish within the time limits. The Advanced battery is new and covers: Creating a New Nation to 1789; Nationalism, Sectionalism, and Conflict to 1876; Emergence of Modern America to 1918; U. S. in Transition since 1918; Physical Science; and Biological Science. Manual, 31 p., contains similar material as Elementary Battery Manual.—R. L. McCornack.

5297. **Cattell, R. B., King, J. E., & Schuettler, A. K. Personality factor series.** Adult. Sixteen Personality Factor Questionnaire (\$.40 each), C. P. F. Personality Test (\$.20 each), manual, 37 p., (\$4.00). Tucson, Arizona: Industrial Psychology, Inc. and Champaign, Illinois: Institute for Personality and Ability Testing, 1954.—A series of three tests which measure various aspects of the personality, temperament, interest and aptitude of employees. The C. P. F. and N. P. F. tests measure extraversion and neuroticism respectively and all three have distortion scores. The manual discusses the use of these tests in the industrial setting.—R. L. McCornack.

5298. **Chevrier, Jean-Marc. Test Minnesota paper form board revisé.** (Revised Minnesota paper form board test.) Forms AA-FE and BB-FE. New York: The Psychological Corp., 1955.—Directions

are in both English and French in this adaptation of Likert and Quasha's test. The Manual, 4 p., is in French and includes directions for administering and scoring, and norms for several Canadian groups.—*R. L. McCornack.*

5299. Chriswell, M. I. Structural dexterity, a test of mechanical ability. Form B. 15-20 minutes total time. Manual, pp. 13. Chicago, Illinois: C. H. Stoelting Co., 1953.—A measure of the ability to translate the visualization of structures into specific motor responses. This form eliminates some defects noted in Form A. Twelve perspective pictures must be built with the test material. Validation performed in terms of shop and drafting grades in high school and teachers evaluation of machine shop performance. Retest and Spearman-Brown reliabilities are given, in addition to percentile norms for boys in grades 8 and 9 and ages 14 and 15.—*R. L. McCornack.*

5300. Clark, Walter V. Manual for the activity vector analysis. Group, 1 form, adults, untimed, 5-10 minutes. Providence, R. I.: Walter V. Clarke Associates, Inc., 1956.—The subject checks, among 81 words, those that have been used to describe him and those that he believes describe him, measuring the tendency of the individual to use his abilities to best advantage in a given job situation. Interpretation requires the services of a "Certified AVA Analyst." The manual, pp. 52, describes test development, split-half and retest reliability, sub-score intercorrelations, and a number of validity studies. 19 references.—*R. L. McCornack.*

5301. Committee on Diagnostic Reading Tests. Diagnostic reading tests: diagnostic battery: upper level, grade 7 to college freshmen. 2 forms, group. Booklets (\$.15 each except \$.25 for silent and auditory comprehension booklets), manual (\$.25 each), answer sheets (\$.04 each), scoring stencil (\$.25 each), specimen set (\$4.50). New York: Committee on Diagnostic Reading Tests, Inc., 1952.—A battery of eight diagnostic tests designed to follow the administration of the Survey Section for selected students. Each test usually contains several sub-scores, and includes: Section I: Vocabulary; Section II: Comprehension, Silent and Auditory parts; Section III: Rates of Reading, General, Social Studies and Science parts; Section IV: Word Attack, Oral and Silent parts.—*R. L. McCornack.*

5302. Committee on Diagnostic Reading Tests. Diagnostic reading tests: section IV: word attack, part 1. oral (revised). Individual, 2 forms, grade 3—college freshmen, untimed, 30 minutes. Booklet (\$.20), manual, pp. 7 (\$.25). New York: Committee on Diagnostic Reading Tests, Inc., 1950.—A series of six 200-word paragraphs and three lists of 26 words which are read by the testee while the examiner notes errors. The paragraphs range in difficulty from sixth grade upward. Manual gives norms for total errors for groups of Cleveland ninth grades and the relation to the Cleveland Reading Tests. Oral Paragraphs 1-3, Lower Level, extend the range of difficulty down to grade three with a similar extension of the word lists.—*R. L. McCornack.*

5303. Committee on Diagnostic Reading Tests. Diagnostic reading tests: survey section: kindergarten-Grade 4. 2 forms, untimed, 20 minutes per booklet. Booklet I for kindergarten and grade 1.

Booklet II for grade 2, and Booklet III for grades 3-4. Manual, pp. 7 (\$.25), reusable booklets (\$.20 each), answer sheets (\$.04), scoring stencils (\$.25). New York: Committee on Diagnostic Reading Tests, Inc., 1957.—Booklets II and III are group tests measuring reading comprehension and word recognition. Retest and Kuder-Richardson reliabilities are given together with a discussion of validity. Booklet I has vocabulary, one-to-one relationship, visual and auditory discrimination parts together with the same two scores as the other booklets.—*R. L. McCornack.*

5304. Committee on Diagnostic Reading Tests. Diagnostic reading tests: survey section: lower level, grades 4-8, and upper level, grade 7 to college freshmen. 2 forms, group, Reusable Lower Level Booklets (\$.20 each, two required), Upper Level Booklets (\$.25 each), answer sheets (\$.04 each), scoring stencils (\$.25 each), manual (\$.25). New York: Committee on Diagnostic Reading Tests, Inc., 1952.—The Lower Level Booklet I measures word recognition and comprehension while Booklet II measures vocabulary, rate of reading, and story comprehension. Except for the rate score this test is untimed, requiring about 50 minutes. The Upper Level test is timed, requiring 40 minutes of testing time, and provides measures of rate of reading, story comprehension, vocabulary, comprehension, and total comprehension.—*R. L. McCornack.*

5305. Elias, G. Elias family opinion survey. One form, untimed, 40 min., age 12 to adult, group. Test (\$7.50 per 100), specimen set (\$1.00 with test, key, and manual). Chicago, Ill.: Psychometric Affiliates, 1954.—A measure of intra-family homeness-homelessness (acceptance-rejection) while appearing to be concerned only with attitudes toward general community life. Ten subtest scores are given, but their routine use is not indicated because of high intercorrelations. Six validity studies are summarized in the 4-page manual; which also gives split-half and retest reliability, and norms by age and sex.—*R. L. McCornack.*

5306. Fiesenhiser, E. I. The Fiesenhiser test of ability to read drawings. Group, 1 form, untimed or 30 minute time-limit. Test (\$7.50 per 100), specimen set (\$1.00). Chicago, Ill.: Psychometric Affiliates, 1955.—An achievement test of the ability to read drawings, sampling knowledge that might be obtained in either academic or on-the-job experience. 3-page manual presents split-half reliability, and validity correlations with engineering education, semesters of drawing, and months of experience in machine shop or drafting rooms.—*R. L. McCornack.*

5307. Holmes, F. J. The per-flu-dex tests. Seven tests: Per-Symb, Per-Verb, Per-Numb, Flu-Verb, Flu-Numb, Dex-Man, and Dex-Aim. Group, 1 form, 1 minute, adult. Specimen set (\$1.00), tests, each (\$2.00 per 50), Profile-Guidance Sheet (\$2.00 per 50). Chicago, Ill.: Psychometric Affiliates, 1955.—A group of seven one-minute measures of perception, fluency, and dexterity. These abilities were located through factor analysis and are not available in other published tests. The 4-page manual gives retest reliabilities, intercorrelations, and three validation studies.—*R. L. McCornack.*

5308. Kerr, W. A. Tear ballot for industry. Group, untimed, 3 minutes, adult. Test (\$7.50 per 100), Kit (\$5.00 with manual, 50 ballots, supple-

mentary materials). Chicago, Ill.: Psychometric Affiliates, 1948.—An anonymously answered measure of job satisfaction in which the answers are indicated by tearing the edge of the ballot. Ten items measure general and one specific aspects of job satisfaction. The manual, pp. 37, gives Spearman-Brown reliability, item correlations with past turnover rate, and extensive norms by age, sex, geographical location, and type of industry or occupation. Kit contains a reprint of an article by Kerr which summarizes 10 additional validity studies.—R. L. McCornack.

5309. Kerr, W. A. **Tulane factors of liberalism-conservatism.** Group, 1 form, untimed, adult. Test (\$5.00 per 100), specimen set (\$1.00). Chicago, Ill.: Psychometric Affiliates, 1946.—A measure of five factors of liberalism-conservatism: political, economic, religious, social, and aesthetic. 2-page manual presents Spearman-Brown reliability for each scale, subtest intercorrelations in two groups, norms for Protestant or non-denominational colleges and a Catholic seminary, and validity correlations with religious preference, political party affiliation, and size of community.—R. L. McCornack.

5310. Kerr, W. A., & Speroff, B. J. **The empathy test.** Two forms, untimed, 15 min., group. Test (\$5.00 per 100), specimen set (\$1.00 with tests, key, and manual). Chicago, Ill.: Psychometric Affiliates, 1954.—A measure of the ability to put yourself in the other person's position, establish rapport, and anticipate his reactions, feelings, and behaviors. Manual, 4 p., summarizes 12 validity studies; and presents correlations with other abilities; retest, Spearman-Brown and equivalent form reliabilities, and norms for various occupational and educational groups.—R. L. McCornack.

5311. Kosinar, W. C. **The science research temperament scale.** One form, untimed, adults, group. Test (\$5.00 per 100), specimen set (\$1.00 with test, key, and manual). Chicago, Ill.: Psychometric Affiliates, 1955.—A measure of personality traits that are associated with research productivity, inventions or publications. An unlabeled 42 item test developed by the army-psychology forced-choice technique. 4-page manual gives retest reliability, cross-validities with research productivity, and norms for research workers and other groups.—R. L. McCornack.

5312. Langmuir, C. R. **Oral directions test.** Form S, unselected adults, 15 minutes. 33½ rpm record or 3.75 in/sec tape (\$12.00 includes manual, pp. 8, scoring key and 100 answer sheets), answer sheets (\$4.00 per 100), manual only (\$3.50). New York: The Psychological Corporation, 1954.—A wide range test of general mental ability for screening purposes. Form S is a shortened form of the original test. Odd-even reliability, a conversion table to the long form, some illustrative percentile norms by sex and occupation, and an example of predictive validity in an industrial setting are given in the manual.—R. L. McCornack.

5313. Lantz, Beatrice. (Los Angeles County Schools, Calif.) **Easel age scale.** Ages 4 to 8.5. Manual, pp. 20 (\$3.75 includes 4 class record sheets, 30 growth records and 4 clinician's analysis), extra class record sheets, growth records or clinician's analysis (\$.02 each). Los Angeles: California Test

Bureau, 1955.—A rating scale for studying the growth and adjustment of kindergarten and primary grade children through their free tempera paintings. Criteria for the elimination of some paintings and instructions for the rating of form, detail, meaning, and relatedness are given in the Manual. Retest and interrater reliability, correlations with Goodenough, Pintner-Cunningham, and CTMM mental ages, sex differences, subscore intercorrelations, and norms are presented in the Manual.—R. L. McCornack.

5314. Libo, Lester M. **The picture impressions.** Adolescent and adult, white or Negro, untimed, 20-30 minutes, individual, male and female forms. Baltimore, Md.: Lester M. Libo, 1956.—A projective technique consisting of four pictures designed to measure the attraction of a patient toward his therapist. Manual, 14 p., includes directions for administration and scoring for attraction, attempted locomotion, desired locomotion, barriers to desired locomotion, barriers overcome, and satisfaction. Interscorer agreement and validation against whether patient returns for the next interview and judgments of attraction are described by the Manual.—R. L. McCornack.

5315. **Psychometric Affiliates. Fatigue scales kit.** Three devices: Industrial Subjective Fatigue and Euphoria Scales, Retrospective Work Curve Feeling Scales, "Mother's Day" Fatigue Scale. Kit (\$5.00 with scales, manual, supplementary materials), scales, each (\$2.00 per 50). Chicago, Ill.: Psychometric Affiliates, 1954.—Three quickly answered scales for measuring fatigue. The subject tears the margin of the scale to indicate his answer. The fatigue and euphoria scale consists of two items, for feelings of fatigue and feelings of pleasantness. The other two scales ask for when the subject is most tired during the working hours and a multiple-choice item asking why. The manual, 4 p., presents retest or equivalent form reliability for each scale and general norms.—R. L. McCornack.

5316. Remmers, H. H., & Stedman, Louise A. **Bringing up children: an inventory of attitudes.** Group, untimed, 20 minutes, high school, college and adult, forms A. and B., self-scoring booklets (\$2.85 per 20), specimen set (\$.50). Chicago: Science Research Associates, 1954.—An inventory designed to aid in both the evaluation and development of insight into the social and emotional aspects of child development. Manual, 7 p., describes expert keying of test, presents information concerning equivalent-form reliability, and evidence on age, grade, sex, religion, urban-rural, region, income and parental education differences. Percentile norms are given for adult women and for high school students by grade and sex.—R. L. McCornack.

5317. Seashore, Harold G., & Bennett, George K. **The Seashore-Bennett stenographic proficiency test.** Group, Forms B-1 and B-2, 20 minutes of dictation, transcription untimed, 30-60 minutes. 33½ rpm record (\$13.50), 78 rpm records (\$19.50), or 3.75 in./sec. tape (\$13.50) prices include 100 Summary Charts and revised Manual, pp. 8. New York: The Psychological Corporation, 1956.—A set of recorded worksamples constructed to measure the competence of applicants for stenographic positions in business and industry. Manual describes administration and scoring procedures and presents norms by amount of experience, inter-scorer and Spearman-

Brown reliability coefficients, and validity correlations with amount of experience and supervisor's ratings.—*R. L. McCornack.*

5318. Sell, D. E. The evaluation aptitude test. One form, untimed, 50 min., group. Test (\$5.00 per 100), specimen set (\$1.00 with test, key, manual). Chicago: Psychometric Affiliates, 1952.—A measure of the ability to reason deductively in both affective and non-affective contexts for subjects with at least a high school education. Sub-test scores indicate reasoning ability in emotionally neutral situations, two scores measuring influence of emotional bias or social ideology, and an index of indecision. Manual, 14 p., contains high school and college norms and information concerning five validity studies, effect of logic training, retest reliability, Kuder-Richardson and odd-even reliability, and test intercorrelations.—*R. L. McCornack.*

5319. Sell, D. E. Ohio penal classification test. Form PP for penal populations, Form F for females, timed, 25 minutes total time, group, adult. Re-usable test (\$6.50 per 100), answer sheet (\$.75 per 25), specimen set (\$1.00 with test, manual, key, answer sheet). Chicago, Ill.: Psychometric Affiliates, 1952.—A group test of mental ability that is especially adaptable to penal populations, consisting of block counting, digit-symbol number series, and memory span subtests. The test is essentially a power test except for the digit-symbol subtest. The 4-page manual provides correlations of total score with the Wechsler-Bellevue and Revised Beta, subtest intercorrelations, test-retest reliability, and an I. Q. conversion table, and norms for a prison group, ages 17-30.—*R. L. McCornack.*

5320. Smith, Inez Fay. Community improvement scale. Group, untimed, 1 form, adult. Test (\$5.00 per 100), specimen set (\$1.00). Chicago, Ill.: Psychometric Affiliates, 1955.—A 13 item, five-response, scale for measuring neighborhood morale indicating the principal areas of neighborhood morale maintenance. Manual presents Chicago norm data, Spearman-Brown reliability and the results of a validation study.—*R. L. McCornack.*

5321. Terman, Lewis M. Concept mastery test. Group, untimed, 40 minutes, college juniors to college graduate students, form T. Test booklets (\$3.00 per 25 with manual and key), answer sheets (\$1.85 per 50), specimen set (\$3.35). New York: The Psychological Corporation, 1956.—A measure of ability to deal with abstract ideas at a high level, consisting of analogies and identification of synonyms and antonyms. Somewhat easier than Form A which was developed for a longitudinal study of intellectually gifted children. Manual, pp. 10, presents norms for a number of groups, comparable form reliability, intercorrelations of the part scores, correlations with other tests and college grade-point average, and mean score increases with number of years of education and Stanford-Binet levels.—*R. L. McCornack.*

5322. Tiegs, E. W., & Clark, W. W. California reading test. Four levels, grades 1-14. Four forms at each level except 3 forms at top level. 20 to 50 minutes. Test booklets (\$2.45 per 35 including manual, pp. 16, scoring key and class record sheet). Hand scoring answer sheet (\$2.45 per 35) and I. B. M. answer sheet (\$1.40 per 35), specimen set, any one level (\$.50). Los Angeles, California: California

Test Bureau, 1950.—Formerly the Progressive Reading Test, and one of the three parts of the California Achievement Test series. The two major subtests, vocabulary and comprehension, are broken down into three or four subtests in addition to the total score. The manual gives equivalent form reliability, percentile and grade norms, and a discussion of profile interpretation.—*R. L. McCornack.*

5323. Weidner, W. E., & Fensch, E. A. Weidner-Fensch speech screening test. Individual, 2 forms, untimed, grades 1-3. Kit (\$3.50 with manual, scoring key, 50 reusable tests, 50 answer sheets), answer sheets, either form (\$5.00 per 100). Chicago, Ill.: Psychometric Affiliates, 1955.—A picture-making speech test for use in the primary grades in screening out children with speech difficulties. A total score is provided but the authors recommend a diagnostic study of the individual sounds. 3-page manual presents total-score percentile norms.—*R. L. McCornack.*

(See also abstract 5778)

STATISTICS

5324. Angoff, William H. A note on the estimation of nonspurious correlations. *Psychometrika*, 1956, 21, 295-297.—A method is provided for estimating the nonspurious correlation of a part of a test with the total test. Two cases are considered: one in which the actual subtest is parallel to the total test, the other in which the actual subtest is not parallel to the total test.—*M. O. Wilson.*

5325. Bass, Bernard M. (Louisiana State U., Baton Rouge), & Wurster, Cecil R. Using "mark sense" for ratings and personal data collection. *J. appl. Psychol.*, 1956, 40, 269-271.—The use of IBM "mark sense" cards for data collection, followed by standard machine handling of the punched cards, is described in connection with the analysis of hospital admissions data, correctional school data, ratings analysis, and similar applications.—*P. Ash.*

5326. Bush, Robert R., Abelson, Robert P., & Hyman, Ray. Mathematics for psychologists: examples and problems. New York: Social Science Research Council, 1956. vi, 86 p. \$2.00.—A series of illustrations and problems, with answers, coordinated to 4 mathematics textbooks. The material illustrates the way in which mathematics is currently used in mainly 3 areas of psychology: testing and measurement; psychophysics and physiological psychology; and learning. Calculus, mathematical foundations, matrix algebra, and probability theory and the mathematical topics covered.—*R. L. McCornack.*

5327. Caffrey, John. (Los Angeles Pub. Schs., Calif.) "Estimated true growth"—Lord's equations applied to reading test data. *Calif. J. educ. Res.*, 1956, 7, 178-182.—"An apparent loss (on successive test data) may actually represent an estimated gain," according to Lord's methods of analysis. . . . The effect of test unreliability is often overlooked or forgotten in analyzing apparent (i.e., simple arithmetic) differences in scores before and after learning intervals. Illustrative cases are presented.—*T. E. Newland.*

5328. Clelland, Richard C. Nonparametric confidence limits of the interquartile range. *Dissertation Abstr.*, 1956, 16, 1412.—Abstract.

5329. Creelman, John A. Development of an intermediate criterion of success in Naval air training. *USN Sch. Aviat. Med. Res. Rep.*, 1956, No. NM 001 108 100, Rep. No. 18, ii, 6 p.—The feasibility of employing intermediate criteria as satisfactory substitutes for the present pass-fail criterion was determined. It was found that a satisfactory substitute is furnished by pass-fail at the end of primary flight training.
5330. Cuadra, Carlos A. (*VA Hosp., Downey, Ill.*) A new technique for rapid item analysis. *J. appl. Psychol.*, 1956, 40, 187-188.—A rapid method of item analysis designed for use with Hanes-type (or Testcor) answer sheets is described. Whereas the item analysis of 25 versus 25 MMPI protocols usually takes . . . from 15 to 20 hours . . . use of the new method . . . [requires] . . . only four to five hours.—P. Ash.
5331. Cureton, Edward E. (*U. Tennessee, Knoxville.*) Rank-biserial correlation. *Psychometrika*, 1956, 3, 287-290.—"A formula is developed for the correlation between a ranking (possibly including ties) and a dichotomy, with limits which are always ± 1 . This formula is shown to be equivalent both to Kendall's r and Spearman's ρ ."—M. O. Wilson.
5332. Deuel, P. D. (*U. California, Berkeley.*) A nomogram for factor analysts. *Psychometrika*, 1956, 21, 291-294.—"When a new reference vector is chosen graphically from the plane of two old ones, its direction cosines as well as the projections of the tests on it are most easily computed by applying certain multipliers d and Sd to quantities which are already known. The nomogram quickly supplies d , after S has been read from the graph."—M. O. Wilson.
5333. Dixon, Wilfrid J., & Massey, Frank J., Jr. (*U. California, Los Angeles.*) Introduction to statistical analysis. (2nd ed.) New York: McGraw-Hill, 1957. xiii, 488 p. \$6.00.—This textbook (see 25: 7185) is still written for the basic course for students from all fields; and it requires only algebra. Most chapters have been changed by rewriting and the addition of new materials. Major changes have been made in the chapters on central tendency and dispersion, statistical inference, and analysis of variance. Additional material includes a new chapter on probability, 133 references at the end, and an increase from 26 to 33 tables, with many of the old tables greatly enlarged.—R. L. McCornack.
5334. Ferguson, Thomas. On the existence of linear regression in linear structural relations. *Univ. Calif. Publ. Statist.*, 1955, 2, 143-166.—The linearity of the multiple regression of one variable on several others when the variables are connected by a linear structural relation is discussed. Extensions are made in several directions of certain results of other authors. Also a relation to identifiability is considered.—G. C. Carter.
5335. Fifer, Gordon. Estimation of item difficulty. *Dissertation Abstr.*, 1956, 16, 1489-1490.—Abstract.
5336. Fishman, Joshua A. A note on Jenkins' "Improved method for tetrachoric r ." *Psychometrika*, 1956, 21, 305.—Instruction for finding negative correlations by the Jenkins method is shown (see 30: 3746).—M. O. Wilson.
5337. Garner, W. R. (*Johns Hopkins U., Baltimore, Md.*), & McGill, William J. The relation between information and variance analyses. *Psychometrika*, 1956, 21, 219-228.—"Analysis of variance and uncertainty analysis are analogous techniques for partitioning variability. In both analyses negative interaction terms due to negative covariance terms that appear when non-orthogonal predictor variables are allowed may occur. Uncertainties can be estimated directly from variances if the form of distribution is assumed. The decision as to which of the techniques to use depends partly on the properties of the criterion variable. Only uncertainty analysis may be used with a non-metric criterion. Since uncertainties are dimensionless (using no metric), however, uncertainty analysis has a generality which may make it useful even when variances can be computed."—M. O. Wilson.
5338. Gilbert, Edgar J. (*Harvard U., Cambridge, Mass.*) The matching problem. *Psychometrika*, 1956, 21, 253-266.—"Tables of the exact distributions of number of matches are given for small decks having the same number of cards in each suit. Several approximate distributions are considered for use with larger decks, and some indication of the goodness of the approximations is given."—M. O. Wilson.
5339. Guilford, J. P., & Michael, William B. Intermediate statistical exercises. (3rd ed.) New York: McGraw-Hill, 1957. vii, 122 p. \$2.95.—The exercises in this volume are designed to parallel chapters 10 through 19 of the senior author's "Fundamental statistics in psychology and education," (see 30: 7940), although they could be used advantageously with several other texts. The answers to all exercises are included in an appendix.—R. L. McCornack.
5340. Gulliksen, Harold. (*Princeton U., N. J.*) Measurement of subjective values. *Psychometrika*, 1956, 21, 229-244.—"Four different value laws are developed and tested by using them to predict the scale values of composite stimuli from the scale values of their components. These four laws are: an additive law, a square-root law, a logarithmic, and a negative exponential law. They are tried out on a set of food preferences by means of Pearson's Method of False Position. The negative exponential law of diminishing returns gave the best fit to the data but was not markedly better than any of the other laws." 17 references.—M. O. Wilson.
5341. Guttman, Louis. "Best possible" systematic estimates of communalities. *Psychometrika*, 1956, 21, 273-285.—"At least four approaches have been used to estimate communalities that will leave an observed correlation matrix R Gramian and with minimum rank. It has long been known that the square of the observed multiple-correlation coefficient is a lower bound to any communality of a variable of R . This lower bound actually provides a "best possible" estimate in several senses. Furthermore, under certain conditions basic to the Spearman-Thurstone common-factor theory, the bound must equal the communality in the limit as the number of observed variables increases. Otherwise, this type of theory cannot hold for R ."—M. O. Wilson.
5342. Hartley, H. O. (*Iowa State Coll., Ames.*) A plan for programming analysis of variance for

general purpose computers. *Biometrics*, 1956, 12, 110-122.—Despite the great variety of experimental designs, it is possible to reduce the majority of designs to a general factorial experiment. While for a particular design there may be shorter routines, the value of this standard computing program lies in its generality and in the fact that only minor changes in the standard are required for most designs. Reduction procedures are given, except for unbalanced non-orthogonal designs.—R. L. McCornack.

5343. Horst, Paul. (U. Washington, Seattle.) **Simplified computations for the multiple group method of factor analysis.** *Educ. psychol. Measmt.*, 1956, 16, 101-109.—Further simplifications in the computational procedures for the multiple group method of factor analysis are described. The computational format has been designated as the triangular method and "... provides complete algebraic checks." Proof is presented that the method yield the same results as those given by Thurstone and Fruchter.—W. Coleman.

5344. Horst, Paul, & Schaie, K. W. (U. Washington, Seattle.) **The multiple group method of factor analysis and rotation to a simple structure hypothesis.** *J. exp. Educ.*, 1956, 24, 231-237.—If a simple structure hypothesis is available the multiple group method and Tucker's rotational method may be combined to effect a great economy of labor in computing the simple structure factor loading matrix. The solution does not depend upon the order of the groups. The authors describe a procedure utilizing this method and illustrate it with the aid of a numerical example.—E. F. Gardner.

5345. Hoyos, Karl. **Zur Methodik der Bewährungskontrolle in der Berufseignungsprüfung.** (Methodology of control of reliability and validity in aptitude tests.) *Psychol. Rdsch.*, 1956, 7, 204-223.—A review of the predominantly American literature about reliability and validity of tests applied to the problem of vocational fitness.—W. J. Koppitz.

5346. Karon, Bertram P. (Educational Testing Service, Princeton, N. J.) **The stability of equated test scores.** *J. exp. Educ.*, 1956, 24, 181-195.—The effects of sampling error were studied empirically with respect to 4 methods of equating scales of tests administered to non-overlapping groups of subjects: (1) mean and sigma method, (2) equi-percentile method, (3) maximum likelihood method using an "anchor" test, (4) standard reference group method using an "anchor" test. Results showed that sampling error was (1) smaller for those methods which make use of an "anchor" test than for those which do not and (2) smaller for equated scores closer to the mean of the total population than for those further from the mean.—E. F. Gardner.

5347. Katz, Leo. (Michigan State U., East Lansing.), & Wilson, Thurlow R. **The variance of the number of mutual choices in sociometry.** *Psychometrika*, 1956, 21, 299-304.—"The variance of the number of mutual dyads in a sociometric situation where each member of a group chooses independently and at random is derived for unrestricted numbers of choices per group member, as well as for a fixed number of choices. The distribution of the number of mutuals is considered."—M. O. Wilson.

5348. Kingsley, Barbara J. (Civil Service Bd., Portland, Ore.) **Streamlined substitute for auto-**

mation. *Publ. Personnel Rev.*, 1956, 17, 132-136.—In the absence of the complex electronic scoring devices, IBM-type answer sheets may be scored in groups of about 30 by placing them in a stack and drilling a hole through each correct response. When each answer sheet is placed against a dark background the correct responses are immediately identifiable, making the answer sheet a "key," in a sense. The papers are scored by running a pencil line through the number, to the left, of each incorrect response.—A. J. Spector.

5349. Kraft, Charles. **Some conditions for consistency and uniform consistency of statistical procedures.** *Univ. Calif. Publ. Statist.*, 1955, 2(6), 125-142.—S. Kakutani has characterized the orthogonality of 2 product distributions on a space of infinite samples in terms of distances between the corresponding distributions in the finite sample spaces. That a similar characterization can be given for arbitrary distributions and that the concepts will lead to interesting statistical conclusions is suggested by Doob's study of martingales. Conditions for the extence of consistent statistical procedures in terms of these concepts are given.—G. C. Carter.

5350. Lev, Joseph. (N. Y. State Dept. Civil Service, Albany.) **Maximizing test battery prediction when the weights are required to be non-negative.** *Psychometrika*, 1956, 21, 245-252.—"A procedure is developed for computing optimum regression weights under the restriction that they be nonnegative. The weights maximize, subject to the restrictions, the multiple correlation between several predictors and a criterion. A numerical example is provided."—M. O. Wilson.

5351. Lewontin, R. C., & Prout, Timothy. **Estimation of the number of different classes in a population.** *Biometrics*, 1956, 12, 211-223.—In estimating the number of different kinds of objects in some discrete population, the type of estimation procedure used depends upon the frequency distribution of the various classes in the population. For unimodal distributions this problem has been solved. This paper presents a maximum likelihood estimator for distributions in which the classes are uniformly distributed. The variance and expected value of the estimator are derived in addition to its sufficiency.—R. L. McCornack.

5352. Lord, Frederic M. (Educational Testing Service, Princeton, N. J.) **Sampling error due to choice of split in split-half reliability coefficients.** *J. exp. Educ.*, 1956, 24, 245-249.—The formula and derivation are given for the sampling variance of the "random-halves" reliability coefficient when all possible splits are sampled for a given group of examinees. An adaptation of the Jackson-Ferguson Battery Reliability Coefficient, used as an estimate of the matched-forms reliability of the test is proposed by the author in order to reduce the relatively large sampling variance which occurred under the other methods discussed.—E. F. Gardner.

5353. MacRae, Duncan, Jr. **An exponential model for assessing fourfold tables.** *Sociometry*, 1956, 19, 84-93.—"A latent-structure model using exponential functions in the trace lines has been proposed and some of its properties examined. It has been applied to one particular problem: the comparison of a pair of items with similar positive marginal

proportions, to see whether they might have come from a common scalable universe. This operation is useful if one wishes to construct cumulative (Guttman) scales by pairwise comparison of items, rather than by using a provisional total score as an initial criterion of scalability. For pairwise comparison, this model is believed to be a more realistic one than the restricted latent-distance model using rectangular trace lines."—H. P. Shelley.

5354. Medley, Donald M., Mitzel, Harold E., & Doi, Arthur N. (Municipal Coll., New York.) **Analysis-of-variance models and their use in a three-way design without replication.** *J. exp. Educ.*, 1956, 24, 221-229.—It was the purpose of the authors to state and illustrate the implications of the use of each of 3 elementary analysis-of-variance models, using data gathered in a series of observations of classroom teachers. Emphasis was placed on the extent to which the consideration about the populations to which the findings were to be applied, influenced the choice of models.—E. F. Gardner.

5355. Merrill, W. Jay, Jr., & Bennett, Corwin A. (IBM, Endicott, N. Y.) **The application of temporal correlation techniques in psychology.** *J. appl. Psychol.*, 1956, 40, 272-280.—"Definitions and computation procedures for various temporal correlation techniques are presented. These techniques include serial correlations for discrete data and correlation functions for continuous data. Specifically described are autocorrelations for temporal relatedness within one series of data, and crosscorrelations for such relatedness between two series. These techniques are appropriate for discovery of both cyclical and noncyclical temporal phenomena. Various applications of temporal correlation techniques within psychology are described." 29 references.—P. Ash.

5356. Messick, Samuel J. (U. Illinois, Urbana.) **Some recent theoretical developments in multidimensional scaling.** *Educ. psychol. Measmt.*, 1956, 16, 82-100.—The rational basis for the multidimensional scaling model is presented and several methods for estimating inter-stimulus distances are presented. These include the methods of (1) triadic combinations, (2) tetrads, (3) multidimensional rank order, (4) graded dichotomies, (5) triads, and (6) successive intervals. Certain limitations that are common to all of these methods are discussed. 35 references.—W. Coleman.

5357. Michael, William R. **Development of statistical methods especially useful in test construction and evaluation.** *Rev. educ. Res.*, 1956, 26, 89-109.—A significant number of the writings since 1952 reviewed in this article deal "either with new or with modified statistical procedures that can be employed in the analysis and/or selection of test items, or with the development of such computational aids as tables, charts, or graphs that effect considerable savings in time and effort required of the test technician." The author considers 69 recent references under the following system of classification: new or modified procedures for selection of items, computational aids to item analysis, estimation of the reliability of tests, evaluation of sampling errors in item and test analysis, prediction techniques, transformation of scale values, profile and pattern analysis, and miscellaneous contributions.—W. W. Brickman.

5358. Mitra, Shib K. (Indian Statistical Institute, Calcutta.), & Fiske, Donald W. **Intra-individual variability as related to test score and item.** *Educ. psychol. Measmt.*, 1956, 16, 3-12.—An interests questionnaire and an adjective check list were administered twice with a 10 week interval to 118 USAF aircrew trainees. Variability scores for each individual were computed on the basis of any shift in response at all. Reliable individual differences in variability were obtained, but when homogeneous responses were made for an item that item elicited less variability. The variability of an individual's responses would seem to be "... a function of the degree to which his test score approaches the 'chance point.'"—W. Coleman.

5359. Moonan, William J. (USN Personnel Research Field Activity, San Diego, Calif.) **An analysis of variance method for determining the external and internal consistency of an examination.** *J. exp. Educ.*, 1956, 24, 239-244.—The author presented an experimental model which hypothesized the parametric form of a response by a subject to an item of an examination which was administered to the same subject several times. Tests of certain hypotheses associated with the parameters of the models were made by means of an analysis of variance. The author showed how to make point and interval estimates and tests for the existence of the coefficient and index of internal consistency as well as the coefficients of external consistency.—E. F. Gardner.

5360. Orr, David Bram. **The distance measure as a statistic for clustering jobs.** *Dissertation Abstr.*, 1956, 16, 1290-1291.—Abstract.

5361. Stecklein, John E. (U. Minnesota, Minneapolis.) **Empirical comparison of six cessation tests for use in principal components factor analysis.** *J. exp. Educ.*, 1956, 24, 165-180.—Tests to determine when one should cease the extraction of factors, as devised by 6 different authors, were compared in their application to a factor analysis of word fluency and vocabulary test data for several groups of individuals. Reasonable agreement was reported between the Kelley, Hoel, McNemar and Burke tests on all data, and Bartlett's tests on one set of data tested. The Guilford-Lacey Test failed to specify a cessation point for any of the four sets of data. The easiest test to use was an adaption of the Kelley test, although it proved to be the most conservative of the tests studied.—E. F. Gardner.

5362. West, Evelyn M. (Columbia U., New York.), & Bendig, A. W. **Esthetic fatigue in ranking.** *Amer. J. Psychol.*, 1956, 69, 285-287.—Guilford and Woodworth give as one disadvantage of paired comparison and ranking methods, the esthetic fatigue generated by S's making a large number of judgments. This factor was studied by requiring Ss to rank and re-rank a series of 12 colored paintings. Between these two rankings, S ranked 0, 1, 2, 3, or 4 other series of 12 paintings. "The correlation between a judge's first ... and his second ranking ... is a decreasing rectilinear function ..." of the number of interpolated rankings. The experiment does not reveal whether this is a result of esthetic fatigue, of retroactive inhibition, or of some other psychological phenomenon.—R. H. Waters.

5363. Westerfield, W. W. **Biological response curves.** *Science*, 1956, 123, 1017-1022.—"Many

growth and biological response curves have a sigmoid shape or can be considered to be portions of S-shaped curves. Such curves are similar to the graphic representations of electron and proton transfers (when all are plotted in an analogous way), and such curves can be described mathematically by using a general equation that is based on the mathematical expressions governing electron and proton exchanges. The purpose of this article is to identify the existing analogies and to show how certain growth and biological response curves correspond to this relationship."—S. J. Lachman.

(See also abstracts 5276, 5801, 5906)

REFERENCE WORKS

5364. Lejeune, Fritz, & Bunjes, Werner E. *Deutsch-englisches; Englisch-deutsches Wörterbuch für Ärzte. (2 Bänden.)* (German-English; English-German dictionary for physicians. (2 vol.)). Stuttgart, Germany: Georg Thieme, 1954, 1953. xxii, 1349; xl, 1737 p. DM 33; 58.50.—Volume 1 contains about 43,000 entries with pronunciation. The goal of volume 1 is to give the terminology of actual practice, whereas the second volume is designed to facilitate understanding of theoretical literature. Therefore, volume 2 introduces a number of terms not included in Volume 1.—M. Antalffy.

5365. Metcalfe, John. *Information indexing and subject cataloging: alphabetical, classified, coordinate, mechanical.* New York: Scarecrow Press, 1957. 338 p. \$6.75.—An analysis of the theory and practice of indexing, subject cataloging, and the approaches to synthetic classification that have been of major interest. Over 50 systems of information indexing, book and document cataloging and classifying from 1856 to the present time are compared. The theoretical and practical considerations of classical versus alphabetical indexing are weighed and the pros and cons of currently proposed systems are considered as against actual performance. 114-item bibliography.—A. J. Sprow.

ORGANIZATIONS

5366. Adkins, Dorothy C., & Jeffrey, Thomas. (U. North Carolina, Chapel Hill.) *Ransom's "central interest" factor.* *Amer. Psychologist*, 1956, 11, 336-338.—In an earlier article Ransom (see 31: 103) finds support for her "psychological" analysis of divisional groupings "when the factorial treatment of Adkins' data (see 29: 1831) is extended to the point where a central interest factor is revealed." It is suggested that Ransom's findings are based upon an erroneous procedure.—S. J. Lachman.

5367. American Psychological Association. *Program of the sixty-fourth annual convention of the . . .* *Amer. Psychologist*, 1956, 11, 355-461.—Announcements of various meetings and abstracts of papers to be delivered at the Convention are presented.—S. J. Lachman.

5368. College Entrance Examination Board. *Fifty-fifth report of the Director, 1956.* New York: Author, 1957. xiii, 133 p. 50¢.—The elected officers and committees; the appointed officers and committees; the report of the Director; the candidates and the tests; members of the College Entrance Examination Board; examiners; readers; examina-

tion centers; and the report of accountants are presented.—G. C. Carter.

5369. The Ford Foundation. *Annual Report, October 1, 1955 to September 30, 1956.* New York: Author, 1957. 286 p.—This 12-section report extends from October 1, 1955 to September 30, 1956. Section 3 deals with the "behavioral sciences," p. 45-56.—L. A. Pennington.

5370. Southern Society for Philosophy and Psychology. (Joseph E. Moore, Sec'y.) *Proceedings of the Forty-eighth Annual Meeting of the . . .* *Amer. Psychologist*, 1956, 11, 286-287.

5371. Training School. Vineland, New Jersey. *Annual report, 1955-1956.* *Train. Sch. Bull.*, 1956, 53, 115-147.—Reports of the president, director, board of visitors, and staff of the Training School at Vineland, N. J.—W. L. Wilkins.

HISTORY & BIOGRAPHY

5372. ———. Hans Zulliger. *Rev. Psychol. appl.*, 1956, 6, 203-205.—Appreciation; portrait; 26-item bibliography.

5373. ———. Morris S. Viteles. *Notice biographique et bibliographie.* (Morris S. Viteles. Biography and bibliography.) *Rev. Psychol. appl.*, 1956, 6, 45-51.—Brief biography and 120-item bibliography.

5374. ———. S. Freud—Meah shana l'huladto. (S. Freud—centenary of his birth.) *Urim*, 1955-56, 13, 618-628.—Contains: About "Totem and Tabu"—Thomas Mann; Freud and the human being—Arnold Zweig; Reflections about the "house that Freud built"—H. R.; The maturation years of Freud—Hilda Spiel; Freud's photograph as a child; A drawing—H. Struck.—H. Ormian.

5375. Bailey, Percival. (Illinois State Psychopathic Inst., Chicago.) Janet and Freud. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 76-89.—The theoretical systems developed by Freud and Janet are set forth and contrasted. It is concluded that neither influenced the other and that both developed different ways of looking at man and his relation to the world. Janet is described as "one of the greatest thinkers of all time in the field of abnormal psychology." 46 references.—L. A. Pennington.

5376. [Binger, Carl.] In memoriam, Dr. Thomas A. C. Rennie (1904-1956). *Psychosom. Med.*, 1956, 18, 278.—Obituary.

5377. Bondy, Curt. *Social psychology in Western Germany.* Washington, D. C.: Library of Congress, Reference Department, 1956. viii, 84 p. 70¢.—The first part of the report is devoted to a general review of the development of social psychology in Western Germany before 1945, containing discussions on the influence of the group on individual performance, the structure of the group, the influence of more permanent social conditions on the individual, and the family itself. In the second part, studies on social psychology from 1945 to 1955 are reviewed and abstracted.—E. L. Gaier.

5378. Breuer, Josef, & Freud, Sigmund. *Studies on hysteria.* New York: Basic Books, 1957. xxxi, 335 p. \$5.50.—This is a reprinting of Volume II of the Standard edition of the complete psychological works of Sigmund Freud (Hogarth Press, 1955).

This translation includes Breuer's contributions, but is otherwise based on the German edition of 1925, containing Freud's extra footnotes.—*A. J. Sprow.*

5379. **Carter, Jerry W., Jr.** (NIMH, Bethesda, Md.) **C. M. Louttit, psychologist.** *Science*, 1956, 124, 526-527.—Obituary.

5380. **Cattell, Jaques. (Ed.) American men of science; a biographical directory. (9th ed.) Vol. III. The social and behavioral sciences.** New York: R. R. Bowker Co., 1956. xiii, 762 p. \$20.00.—Psychology, geography, and anthropology have been entered in this volume from earlier editions, but other fields in the social sciences have been added, many from the "Directory of American scholars."

5381. **Dallenbach, Karl M. (U. Texas, Austin.) Madison Bentley: 1870-1955.** *Amer. J. Psychol.*, 1956, 69, 169-186.—Obituary. Portrait, frontispiece.

5382. **Deutsch, Felix. Reflections on Freud's one hundredth birthday.** *Psychosom. Med.*, 1956, 18, 279-283.—Recollections regarding the onset of Freud's illness (1923-1924), his reactions to it, and the psychosomatic problems involved, are discussed.—*L. A. Pennington.*

5383. **Ellson, D. G. (Indiana U., Bloomington.) William Lowe Bryan: 1860-1955.** *Amer. J. Psychol.*, 1956, 69, 325-327.—Obituary.

5384. **Fizer, John. (U. Notre Dame, South Bend, Ind.) Errata of Freud.** *Amer. J. Psychol.*, 1956, 69, 309-311.—In his attempt to establish the meaning of a dream symbol, specifically the sexual meaning of the wood symbol, Freud made certain mistakes as a consequence of his less than thorough knowledge of etymology and the laws of general linguistics. This type of error creates "considerable doubt as to the validity of his other non-linguistic explanations."—*R. H. Waters.*

5385. **Golan, Sh., & Lavi, Z. Sigmund Freud v'torato. (S. Freud and his teachings.) Ofakim,** 1956, 10, 122-133.—"Freud turned psychology into science of man, which is able to analyze, to understand and to explain mental phenomena. This science provides rules, which enable us to predict man's behavior in various conditions of life, to avoid perversions of pathological development, and to assure thereby more happiness to future generations." Freud's appearance is described on the background of psychology in his time. His contributions to psychology, medicine, education and social science are evaluated as well as the link between psychoanalysis and Marxism.—*H. Ormian.*

5386. **Gruber, Howard, & Gruber, Valmai. Hermann von Helmholtz: nineteenth-century polymorph.** *Sci. Mon., N. Y.*, 1956, 83, 92-99.—Appreciation.

5387. **Hacker, Frederick J. (Hacker Foundation, Beverly Hills, Calif.) The living image of Freud.** *Bull. Menninger Clin.*, 1956, 20, 103-111.—This tribute to Freud on the centennial anniversary of his birth stresses the complexity of his personality and our difficulty in penetrating the barrier of his reticence concerning himself and the veil of respect which covers up our often ambivalent emotions.—*W. A. Varvel.*

5388. **Hitschmann, Edward. Freud correspondence.** *Psychoanal. Quart.*, 1956, 25, 357-362.—A

tribute to Freud on his sixtieth birthday, written by Dr. Hitschmann in the form of a personal letter, is presented together with Freud's reply. Both documents are presented in English and in German. A photographic reproduction of Freud's reply is included.—*L. N. Solomon.*

5389. **Jaccard, Pierre. Le quatre-vingtième anniversaire de Larguier de Bancel.** (The eightieth anniversary of Larguier de Bancel.) *Schweiz. Z. Psychol. Anwend.*, 1956, 15, 152.—An appreciation of the work of Professor Jean Larguier on occasion of his eightieth birthday.

5390. **Kavrucek, Samuel. Thirty-three years of test research: a short history of test development in the U.S. Civil Service Commission.** *Amer. Psychologist*, 1956, 11, 329-333.—"In the United States civil service, competitive examining was not permanently installed until 1883." Among the psychologists associated with the Civil Service Commission during its development were R. M. Yerkes, John B. Watson, L. J. O'Rourke, and L. L. Thurstone. Various divisions concerned with the work of psychologists and their particular functions are discussed. Accomplishments, continuing work, and plans relating to phases of psychology in the civil service are considered. "Constant review of progress in all major areas of human measurement is being made in order to determine the feasibility of extending any meaningful approaches to the needs of the Civil Service Commission."—*S. J. Lachman.*

5391. **Kulcer, Shlomo. Freud v'doro. (Freud and his generation.) Ofakim,** 1956, 10, 143-151.—Freud's appearance is explained on the background of the spiritual atmosphere at the end of the XIX century. A systematic, historical and critical description of Freud's inventions and concepts is given. Special attention is paid: (1) to the relation between psychoanalysis and Marxism (the contrast is not essential, but, "tactical"), and to the possibility of a compromise between these 2 outlooks; (2) to Freud's relation to religion. His "Jewishness appears first of all not in the content of his teachings, but in the form, in his methods and ways of thinking"; there is a considerable parallel between the Talmudic way of thinking and the psychoanalytical one.—*H. Ormian.*

5392. **Lersch, Philipp. Nachruf auf Prof. Dr. Oswald Kroh.** *Psychol. Rdsch.*, 1956, 7, 55-57.—Obituary.

5393. **M., R. Zur hundertsten Wiederkehr des Geburtstages von Sigmund Freud, 6. Mai 1856.** (On the one hundredth return of the birthday of Sigmund Freud, 6 May 1856.) *Schweiz. Z. Psychol. Anwend.*, 1956, 15, 81-83.—An appreciation of Freud's psychology with a brief reference to its special role in Swiss psychology. With a picture of S. Freud.—*K. F. Muenzinger.*

5394. **McGrade, M. C., & Dallenbach, Karl M. (U. Texas, Austin.) A bibliography of the writings of Madison Bentley.** *Amer. J. Psychol.*, 1956, 69, 187-193.—A 157-item bibliography.

5395. **Morgenthaler, Walter, et al. Begegnungen von Schweizern mit Freud und seinen Werk. (Meetings of Swiss with Freud and his work.) Schweiz. Z. Psychol. Anwend., 1956, 15, 103-151.—On occasion of the centenary of Freud's birth a number of Swiss psychologists tell of their**

first meetings with Freud, relate personal recollections, submit letters from him, or recall items of the history of psychoanalysis in Switzerland. Psychologists contributing were Ludwig Binswanger, Oskar Pfister, A. Maeder, Adolf Keller, Rudolf Brun, Ernst Schneider, Hans Zulliger, Raymond de Saussure, Théodore Flournoy, Ed. Claparède, and Ernst Blum.—*K. F. Muenzinger.*

5396. **Piaget, Jean.** Some impressions of a visit to Soviet psychologists. *Acta psychol.*, 1956, 12, 216-219.—A visit to the Soviet Union produced these impressions: scientists enjoy importance, independent of party affiliations; there is a diversity of opinion on essential questions and answers to these are frank and objective; there is a large number of psychologists; work in the fields of reflexology, intelligence, thinking, oligophrenia and child psychology is impressive.—*G. Rubin-Rabson.*

5397. **Rabin, Israel.** Hagisha hamadait-nisuyit lapsihoanaliza b'artsot-habrit. (The scientific-experimental approach to psychoanalysis in the U.S.A.) *Ofakim*, 1956, 10, 164-167.—Freud's visit to the States (1909) did not diminish the opposition against his teachings. The main counter-argument was directed against the psychoanalytical methods of research. Thus, experiments are described, which enable the psychologist to affirm or to reject some psychoanalytical concepts, e.g., frustration, Oedipus complex, latency period, defense mechanisms, repression.—*H. Ormian.*

5398. **Ratner, Sidney.** A. F. Bentley's inquiries into the behavioral sciences and the theory of scientific inquiry. In *Taylor, Richard W. (Ed.), Life, language, law: Essays in honor of Arthur F. Bentley*. Yellow Springs, O.: The Antioch Press, 1957. Pp. 26-57.—This essay sketches the main outlines of Bentley's life and tries to show how his work grew out of specific conditions, experiences, and interests. The central objectives and results of Bentley's successive investigations are presented in an attempt to obtain an overall view of his life-work and influence. 37 references.—*L. N. Solomon.*

5399. **Reuchlin, Maurice.** Histoire de la psychologie. (History of psychology.) Paris, France: Presses Universitaires de France, 1957. 125 p.—The history of psychology is traced in 6 chapters: experimental, animal, differential, social and child psychology, and pathological psychology and the clinical method.—*G. Rubin-Rabson.*

5400. **Révész, G.** Bibliography of works and papers. *Acta psychol.*, 1956, 12, 208-215.—167 bibliographical references are listed under various headings: general psychology, psychological optics, psychology of sound, psychology of music, problem of space, language and thought, talent and genius, child psychology, social psychology, industrial psychology, medical psychology, animal and comparative psychology, pedagogical psychology.—*G. Rubin-Rabson.*

5401. **Russell, Roger W.** John Carl Flugel: 1884-1955. *Amer. J. Psychol.*, 1956, 69, 328-329.—Obituary.

5402. **Simon, Brian. (Ed.)** Psychology in the Soviet Union. Stanford, Calif.: Stanford University Press, 1957. viii, 305 p. \$6.00.—Part I provides a review of psychological research, 1953-1955. 7 papers concerned with the bearing of Pavlovian

physiology on psychology and with direct research into higher nervous activity are grouped in the second section. There are 3 papers on perception and memory in Part III. Some of the researches undertaken to elucidate the mental processes involved in learning are described in the 6 papers included in the fourth section. There are 3 theoretical papers in Part V. In the appendices are a paper which summarizes the main features of psychopathological research in the U.S.S.R. and a brief report on the Fourteenth International Congress of Psychology. 76 references.—*A. J. Sprow.*

5403. **Spiel, Oskar.** The individual psychological experimental school in Vienna. *Amer. J. indiv. Psychol.*, 1956, 12, 1-11.—A review of the background and activities of the school.—*A. R. Howard.*

5404. **Tolman, Edward C.** (U. California, Berkeley.) Egon Brunswik: 1903-1955. *Amer. J. Psychol.*, 1956, 69, 315-324.—Obituary, and summary of contributions.

5405. **Wellek, Albert.** Nachruf auf Prof. Egon Brunswik. *Psychol. Rdsch.*, 1956, 7, 155-156.—Obituary.

5406. **Wellek, Albert.** Nachruf auf Prof. Dr. Géza Révész. *Psychol. Rdsch.*, 1956, 7, 57-58.—Obituary.

(See also abstract 5250)

PROFESSIONAL PROBLEMS OF PSYCHOLOGY

5407. **American Psychological Association.** Division of Counseling Psychology, Committee on Definition. Counseling psychology as a specialty. *Amer. Psychologist*, 1956, 11, 282-285.—"Although counseling psychology leaves to other psychologists the major responsibility for treating psychological disorders, the counseling psychologist may be found working in the full range of social settings. He has unique resources, e.g., tests and other methods of psychological evaluation, for helping individuals to achieve harmonious relationships with their environments. He is willing to work directly with other persons and groups with whom his clients must deal outside of the counseling office. His goal is to further the fullest possible self-realization of those who live in a particular social setting." 20 references.—*S. J. Lachman.*

5408. **American Psychological Association.** Education and Training Board. Doctoral training programs in clinical psychology and in counseling psychology. *Amer. Psychologist*, 1956, 11, 288.—"On recommendation of the Committee on Evaluation, the Education and Training Board with the concurrence of the Board of Directors of the American Psychological Association has approved the doctoral training programs in clinical psychology and in counseling psychology that are conducted by the institutions listed. . . ."—*S. J. Lachman.*

5409. **Comrey, Andrew L.** (U. California, Los Angeles.) Publication rate and interests in certain psychologists. *Amer. Psychologist*, 1956, 11, 314-322.—"To obtain data which might bring into focus some of the more interesting characteristics upon which psychologists differ among themselves, a questionnaire was sent to male APA members in the 1951 APA Directory who listed themselves as employed by a college or university and as members

of Phi Beta Kappa. Results are presented in 8 tables. Items which discriminated significantly between persons with "high" and "low" publication rates are discussed.—S. J. Lachman.

5410. Coyer, Robert A. (St. Lawrence U., Canton, N. Y.) **A course in human engineering.** *Amer. Psychologist*, 1956, 11, 241-243.—"In 1955 we offered an undergraduate course, 'Experimental Industrial Psychology: Human Engineering.'" "As a text we selected *Applied Experimental Psychology* by Chapanis, Morgan, and Garner. . . ." A number of collateral reading sources were also utilized. "The course consisted of formal lectures on experimental methodology and the analysis of the relevant data of perceptual, learning, and physiological psychology." In the lectures ". . . emphasis was given in the lectures to various methodological techniques and controls as they might arise in applied research." An individual research project was required of each student.—S. J. Lachman.

5411. Fernberger, S. W. (U. Pennsylvania, Philadelphia.) **On the number of articles of psychological interest published in the different languages: 1946-1955.** *Amer. J. Psychol.*, 1956, 69, 304-309.—"In 1917, 1926, 1936, 1946, and now in 1956 'the writer has published analyses of the number of articles published in the different languages.'" The present analysis shows for each year of the 10-yr. period, 1946-1955, the number of articles in English, German, French, Italian, Russian, and "all others." This last category is also further analyzed. "English has gained such a numerical superiority that the reading knowledge of other languages is less important than it was some decades ago."—R. H. Waters.

5412. Grosse, Helmut. **Die Erziehungshaltung des Psychologen.** (The educational attitude of the psychologist.) *Psychol. Rdsch.*, 1956, 7, 17-25.—"Influenced by Slavson's group therapeutic work a new educational attitude is proposed in order to overcome the dangers of the authoritarian attitude, strict as well as patronizing. Objectivity, which does not mean impersonal approach, meeting the child on an equal level and a natural, effortless acceptance of the child as a partner characterize such a new attitude. This general attitude is considered as more important for the reorganization of the disturbed child than the particular method used in therapy."—W. J. Koppitz.

5413. Langhorne, M. C. (Emory U., Ga.) **A unique regional program of psychological research and training in the south.** *Amer. Psychologist*, 1956, 11, 323-326.—"The Council on Psychological Resources in the South was appointed by the Southern Regional Education Board and met for the first time on July 16-17, 1953 in Atlanta, Georgia. . . ." The Southern Regional Education Board has made a real contribution to the development of psychology as a science and as a profession. . . .—S. J. Lachman.

5414. Lynn, David B. (Inst. for Soc. Res., Oslo, Norway.) **On being "clinical" with colleagues.** *Amer. Psychologist*, 1956, 11, 249-250.—"There seem to be . . . three major categories of being 'clinical' with colleagues. The first category is the *insult*. . . . The second category of being clinical is the *good deed*. . . . The third category is called *rationalization*."—S. J. Lachman.

5415. McKeachie, Wilbert, & Kimble, Gregory. **Teaching tips; a guide-book for the beginning**

college teacher. (3rd ed.) Ann Arbor, Mich.: George Wahr Publishing Co., 1956. 124 p.—A compilation of "tricks of the trade" which the author has found useful in teaching psychology. (See 28: 8962.) Among topics covered are course planning, classroom administration, lecturing and discussing, examinations and grades, counseling, term papers, role-playing, visual aids, ethics of teaching, learning and motivation, research in teaching, and improving teaching. Appendices contain general psychology course objectives, scales for student ratings of faculty, and a checklist of teaching methods.—F. Costin.

5416. Martin, Peter A. **Note on inhibition of scientific productivity.** *Psychoanal. Quart.*, 1956, 25, 415-417.—"The psychoanalyst must be able to experience criticism realistically in order to be scientifically productive. When criticism is unconsciously experienced as a threat of castration, it can inhibit scientific productivity."—L. N. Solomon.

5417. Miller, Eleanor O. (Norbury Sanatorium, Jacksonville, Ill.) **The psychologist and the small mental hospital.** *Amer. Psychologist*, 1956, 11, 328-329.—"A brief questionnaire was sent to the directors of the 82 hospitals belonging to the National Association of Private Psychiatric Hospitals. Replies were received from 49 or 60% of the sample of which 47 could be used for tabulation. 'Only two hospitals say they do not use psychological tests; four more use them occasionally; one does not say; and the other 40, or 85% of our sample, gives an unqualified 'yes.' All those hospitals giving tests even occasionally, indicate the Rorschach as routine. All but two also list the Wechsler in this way.'" "Only 14 of the hospitals employ full-time psychologists. 23 more employ part-time psychologists."—S. J. Lachman.

5418. Richards, T. W. (Louisiana State U., Baton Rouge.) **Graduate education of Negro psychologists.** *Amer. Psychologist*, 1956, 11, 326-327.—"The 'Council on Psychological Resources in the South was impressed with the dearth of psychologists in the South, particularly Negro psychologists' and appointed a committee '. . . to study the facts in this regard and to make recommendations for pertinent action.'" Fifty-six (98.2%) of fifty-seven graduate departments of psychology surveyed answered questionnaires concerning Negro psychologists receiving graduate degrees and the undergraduate origin of these students. "Negro personnel in psychology come in considerable proportion (one-third) from Negro undergraduate schools in the South." "In the process of bridging the gap between inadequate undergraduate training and high level graduate work, Howard University is making an exceptional contribution toward training in scientific and professional psychology."—S. J. Lachman.

5419. Rogers, Lawrence S. (VA Hosp., Denver, Colo.) **Psychologists in public service and the public.** *Amer. Psychologist*, 1956, 11, 307-313.—"In the opinion of many, the most serious difficulty facing psychologists [in public service] is the attempt to subject professional work to close and minute administrative control." "Our job is not only to give service, but to improve the society we live in. This should be the major contribution of the psychologist in public service."—S. J. Lachman.

5420. Ruesch, Jurgen. **Communication difficulties among psychiatrists.** *Amer. J. Psychother.*,

1956, 10, 432-447.—Although the psychotherapist should be an expert with knowledge about and skill in communication, mutual understanding, tolerance of differences, and enlightening conversation frequently vanish when psychotherapists meet in groups. Some factors contributing to the difficulty of communication among psychotherapists are the following: psychiatry shares with the other social disciplines all the difficulties inherent in the use of words; the distinction between enlightening communication and the reaching of agreements is frequently neglected; divergent opinions are to be expected at this stage of the science and art of psychotherapy; complementary phenomena such as intrapsychic functioning and two-person relations should not be viewed as mutually exclusive; and personal difficulties of the psychiatrist may impede communication. 23 references.—L. N. Solomon.

5421. Schlosberg, Harold. (Brown U., Providence, R. I.) **Hints on presenting a paper at an APA convention.** *Amer. Psychologist*, 1956, 11, 345-346.—Practical suggestions for effective oral communication of research results in the time allowed at conventions.—S. J. Lachman.

5422. White, John Graham. (Alder Hey Hosp., Liverpool, Eng.) **The psychologist's contribution to clinical method; a case of ulcerative colitis.** *J. Psychosom. Res.*, 1956, 1, 160-166.—The position is developed that the experimental method "should be made explicit as much in clinical work with the single case as in research with large numbers. . . ." A case workup relative to a boy of 10 is used illustratively.—L. A. Pennington.

5423. Wilson, Ronald F. (U. Houston, Tex.) **Internships in industrial psychology.** *Amer. Psychologist*, 1956, 11, 243-246.—"The Executive Committee of the Division of Business and Industrial Psychology (Division 14) formed a committee to investigate . . . the nature of training needs which may exist in the transition of psychologists from the academic situation to the situation of practical application. Results of a questionnaire survey relating to the problem are presented.—S. J. Lachman.

5424. Zander, Alvin; Cohen, Arthur R., & Stotland, Ezra. **Role relations in the mental health professions.** Ann Arbor, Mich.: Institute for Social Research, University of Michigan, 1957. vii, 211 p. \$4.50.—"This report is the result of a study of intergroup attitudes and behavior among the members of three professional groups, and of the conditions which appear to determine these feelings." The data were obtained by individual interviews with 156 psychiatrists, 165 clinical psychologists, and 159 psychiatric social workers. Included are observations on the beliefs the different professions hold about themselves and each other, and on how perceived roles and social position influence role relations. Study methods are described in the appendix. 178 references.—H. P. David.

(See also abstract 6035)

FILMS

5425. U.S. Department of Health, Education and Welfare. National Institutes of Health. **Mental health motion pictures. A selective guide.** 1952. Bethesda, Md., Author, 1952. (*Pub. Hlth Serv. Publ. No. 218.*) 124 p. 35¢.—This is a cata-

logue of 106 annotated motion picture films. Synopses, suggested audience, television information, and availability, are given for each film. The films cover such areas as child behavior, family, marriage, school, and others. Information as to film distributors, agencies designated as mental health authorities, and sources for films on psychiatry, psychology, neurology, and neuro-surgery, are also given.—A. Manoil.

5426. U.S. Department of Health, Education, and Welfare. Public Health Service. National Institutes of Health. **1956 Supplement to mental health motion pictures; a selective guide, 1952.** Bethesda, Md., Author, 1956. (*Pub. Hlth Serv. Publ. No. 478.*) 80 p. 30¢.—Short descriptions of 68 recent films in the area of mental health are grouped under the following headings: child and family, marriage, mental health and schools—teachers, mental health and schools—students, mental health problems, physiology of human reproduction, miscellaneous. A list of agencies designated as state mental health authorities, and a list of distributors of films are included.—A. Manoil.

PHYSIOLOGICAL PSYCHOLOGY

5427. Anokhin, P. K. **O fiziologicheskoi prirode vegetativnykh komponentov uslovnoi reaktsii.** (On the physiological nature of the autonomic components of the conditioned reaction.) *Zh. vyssh. nervn. Deiatel.* 1956, 6(1), 32-43.—Data are adduced to show that it is "incorrect to separate the whole conditioned reaction into isolated forms of reactions—autonomic and somatic," but that the "autonomic components of the conditioned reaction are integrated with all the other components."—J. D. London.

5428. Beckman, Edward L., & Ratcliffe, H. L. **A post-mortem study of rhesus monkeys at intervals after single or repeated exposure to negative acceleration.** *J. Aviat. Med.*, 1956, 27, 117-130.—"Twenty-two monkeys were subjected to one or more exposures of negative acceleration (12, 32 or 40 g) and killed fifteen minutes to ninety days later. Their tissues were compared to those of four normal monkeys and of five monkeys that had received equivalent exposures to positive acceleration.—J. M. Vanderplas.

5429. Brett, J. R. **Some principles in the thermal requirements of fishes.** *Quart. Rev. Biol.*, 1956, 31, 75-87.—In fishes, tissue temperature and environmental temperature must constantly be equilibrated at the gill surfaces; optimum thermal environment is, therefore, a temperature range within which internal tissues can best function. Thermal tolerance ranges, thresholds and adaptation times are defined and the relevant literature is reviewed. 78-item bibliography.—L. I. O'Kelly.

5430. Cranmore, Doris. **Behavior, mortality, and gross pathology of rats under acceleration stress.** *J. Aviat. Med.*, 1956, 27, 131-140.—269 male albino rats were subjected to various combinations of magnitude and duration of positive or negative stress. Data on the mortality and gross pathological findings of the animals are presented. Strength-duration curves and mathematical formulae are presented to express the probability of survival of male albino

rats in terms of duration of exposure and magnitude of acceleration stress.—J. M. Vanderplas.

5431. Dexter, Lewis A. Heredity and environment re-explored: specification of environments and genetic transmission. *Eugen. Quart.*, 1956, 3, 88-93.—If development is a function of the environment directing and acting on an inherited dynamic pattern, then nature-nurture researchers should break down the terms "social" and "physical environment" into a series of suggestions for specific observation about actual behaviors. 15 references.—G. C. Schwesinger.

5432. Guliaev, P. I. Fluktuatsii ritma i amplitudy fiziologicheskoi aktivnosti na poroge voz-buzheniia. (Fluctuations of rhythm and of amplitude of physiological activity at the threshold of excitation.) *Fiziol. Zh. SSSR*, 1956, 42, 1033-1037.—Irregular action currents were investigated in the nerve, muscle, motor unit, phalangeal preparation, and the stretch receptors in muscles. It is concluded that at thresholds of excitation, "when specific activity is being established," irregular fluctuations will obtain at the outset. Steady activity is stabilized on attainment of a certain stimulus intensity.—I. D. London.

5433. Harlow, Harry F. (U. Wisconsin, Madison.) Current and future advances in physiological and comparative psychology. *Amer. Psychologist*, 1956, 11, 273-277.—"An important current advance in both comparative psychology and physiology during the last ten years has been the development of a very considerable number of laboratories devoted, at least in part, to the use of primates as experimental subjects." During the next twenty-five years a truly comparative psychology will be developed. A number of predictions are made based in part on recent researches which appear to suggest trends for the future; the presentation is semi-whimsical.—S. J. Lachman.

5434. Schottstaedt, W. W., Grace, W. J., & Wolff, H. G. (New York Hosp.) Life situations, behaviour, attitudes, emotions and renal excretion of fluid and electrolytes. II. Retention of water and sodium; diuresis of water. *J. Psychosom. Res.*, 1956, 1, 147-159.—In 94 situations, rated by 5 Ss as threatening but nonetheless capable of management by remaining alert, "there was a significant decrease in rates of excretion and sodium" as contrasted with 119 other situations rated as "neutral." In other situations characterized by a sudden release from tension there was a significant increase in excretion rate but not in sodium. These and other findings are discussed in relation to the literature on diuresis.—L. A. Pennington.

5435. Shik, L. L. I. M. Sechenov i fiziologiiia rabochikh dvizhenii cheloveka. (I. M. Sechenov and the physiology of motor movements in man.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6(1), 175-181.—A historical survey of the development in Russia of Sechenov's ideas on the physiology of motor movements in man is given. His basic ideas remain uncontradicted.—I. D. London.

5436. Vandenberg, Steven G. (U. Michigan, Ann Arbor.) The hereditary abilities study: the University of Michigan. *Eugen. Quart.*, 1956, 3, 94-99.—In a comparative study of 45 pairs of identi-

cal twins and 37 pairs of same-sex, fraternal twins, on a variety of anthropometric, biochemical and psychological traits, greatest fraternal within-pair variance was found for the following variables which are considered to be under hereditary control: for the biochemical: lysine; for the anthropometric: stature, finger length, span, and nose height; for the psychological: nervous tension, vigorousness, tweezer dexterity, rotary pursuit, sentence completion, vocabulary and spelling. The difference for the psychological traits as usual was less than for the anthropometric, with the biochemical taking an intermediate position.—G. C. Schwesinger.

(See also abstracts 5262, 5326, 6479)

NERVOUS SYSTEM

5437. Buser, Pierre, & Borenstein, Pierre. Variations caractéristiques des réponses sensorielles "associatives" du cortex cérébral du chat en fonction du degré général d'activation corticale. (Characteristic variations in "associative" sensory responses of the cat's cerebral cortex as a function of the general degree of cortical activity.) *C. R. Acad. Sci. Paris*, 1956, 243, 93-96.—Evidence is presented for secondary electrical cortical activity (associated with peripheral stimulation) which appears later and over broader cortical areas than the primary responses usually associated with "degrees of wakefulness" in curarized cats coming out of narcosis.—R. W. Burnham.

5438. Chernigovskii, V. N. K fiziologicheskoi kharakteristike interotseptivnogo analizatora. (On the physiological character of the interoceptive analyzer.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6(1), 53-64.—The nature of the impulses which arise from chemical stimulation of the intestinal tract and mechanical stimulation of the bladder is studied. The "cortical representation of the pelvic nerve was established" which along with that of the vagus nerve helps constitute the "nuclei of the interoceptive analyzer."—I. D. London.

5439. Doll, E. A. (Bellingham (Wash.) Public Sch.) Research on CNS impairment. *Percept. Mot. Skills*, 1956, 6, 255.—The informed clinical child psychologist today is more assuredly able to "spot" encephalopathy from the presumed behavior correlates than is the neurologist from his clinical or laboratory procedures. But the psychologist's reasoning is largely by inference and hypothesis. There is pressing need for research-established convictions to support the empirical and intuitive observations accumulated from experience.—C. H. Ammons.

5440. Duncan, Carl P. (Northwestern U., Evanston, Ill.) On the similarity between reactive inhibition and neural satiation. *Amer. J. Psychol.*, 1956, 69, 227-235.—Reactive inhibition and neural satiation are similar in source (afferent stimulation), locus (central), effects (distortion of behavior), in time required to accumulate and to produce most intense effects, and in the rate of immediate decay. Although evidence on the last is ambiguous, the two are so similar as to suggest that but a single basic process is involved.—R. H. Waters.

5441. Elmadjian, Fred, & Hope, Justin M. Excretion of epinephrine and norepinephrine in various emotional states. Parts I and II. *J. nerv.*

ment. Dis., 1956, 124, 209-210.—Abstract and discussion.

5442. Enoksson, Paul. (U. Lund, Sweden.) **Optokinetic nystagmus in brain lesions.** *Acta ophthalmol., Kbh.*, 1956, 34, 163-184.—In cases of lesions in the cerebral hemispheres, the frequency of optically-induced nystagmic movements is reduced upon rotation of the stimuli toward the side of the lesion. In lesions of the posterior cranial fossa, frequency is reduced on rotation away from the affected side.—M. M. Berkun.

5443. Frost, Laurence. **Electrical activity of the brain.** *Psychiat. Res. Rep.*, 1956, No. 3, 4-6.—The nature and manner of stimulation of the reticular system in relation to the limbic system, the thalamus, and the cortex are areas currently in greatest need of research. Results might well clarify problems in psychiatry insofar as they relate to neuroanatomy in brain function.—L. A. Pennington.

5444. Grashchenkov, N. I. **Korkovo-podkorkovye vzaimo-otnosheniia pri nekotorykh bolezennnykh sostoiianiakh mozga.** (Cortico-subcortical interrelations in certain cases of morbid states of the brain.) *Zh. vyssh. nervn. Deiatel.*, 1956, 6(1), 65-75.—A discussion is given, in terms of Pavlovian theory, of data establishing and illuminating the "induced relations" between cortical and subcortical areas in organically affected brains.—J. D. London.

5445. Himwich, Harold E. (State Res. Hosp., Galesburg, Ill.) **Discussion of papers on basic observations of new psychopharmacological agents.** *Psychiat. Res. Rep.*, 1956, No. 4, 24-31.—The neurology and pharmacology of reserpine, chlorpromazine, Frenquel, and other tranquilizing drugs are discussed with reference to mode and site of action. These observations are related to the recent studies dealing with a deficiency of serotonin in the brain. The hypothesis is suggested that "serotonin may be a cause of abnormal behavior." 19 references.—L. A. Pennington.

5446. Hoagland, Hudson. (Ed.) **Hormones, brain function, and behavior; proceedings of a Conference on Neuroendocrinology held at Arden House, Harriman, New York, 1956.** New York, Academic Press, 1957. 257 p. \$7.00.—Each of the 12 papers is followed by a discussion. The titles of the following sections reflect the topics of the corresponding session: effects of steroid hormones on the nervous system; sex hormones and behavior; serotonin, epinephrine, and their metabolites in relation to experimental psychiatry; and the thyroid and behavior.—N. H. Pronko.

5447. Kas'ianov, V. M. **Vzaimodeistvie tsentral'no-perifericheskikh faktorov v nervnoi deiatel'nosti na primere geterogennogo anastomoza.** (Interaction between central and peripheral factors of nervous activity as seen in heterogenous anastomosis.) *Fiziol. Zh. SSSR*, 1956, 42, 1038-1045.—The phrenic nerve of dogs was sectioned and the central end sutured to the peripheral stump of the cubital nerve sectioned at a high level. After regeneration the phrenic nerve conducted impulses to the muscles of the fore-leg which responded to the efferent impulses by rhythmical contractions, synchronous with respiration. It was found that 90-100 impulses per second evoke the "respiratory" contractions of the muscle.

Evidence was also found for some selection of optimal impulse frequencies by different elements of the muscles. Even after 2 years' control by the phrenic nerve, the striated muscle still retained some of its intrinsic properties, e.g., tetanic contractility.—J. D. London.

5448. Lassek, A. M., & Emery, Sara L. (Boston U.) **Irreversibility of motor function following bilateral simultaneous cortical lesions.** *Neurology*, 1956, 6, 547-551.—Monkeys were subjected to simultaneous bilateral removal of all or of varying portions of area 4. Results indicate almost complete and permanent loss of motor function in animals with simultaneous complete removal of the motor area. Loss of up to 75% of area 4 bilaterally was followed by rapid and almost complete recovery of motor function. In addition, the complete bilateral removal was accompanied by a "loss of resistance" which resulted in very poor post-operative recovery of general health. "The dynamics of the monkey brain appear to be totally disoriented by sudden loss of the Betz cell area on both sides."—L. I. O'Kelly.

5449. Lev, A. A. **Izmenenie elektroentsefalograficheskikh pokazatelei pri povyshenii vozbudimosti kory golovnogogo mozga.** (Changes in electroencephalographic patterns with heightening of cortical excitability.) *Fiziol. Zh. SSSR*, 1956, 42, 1021-1031.—The intensity of minimal electrical stimulation, utilizing electrodes implanted into definite cortical areas in order to elicit a motor response, was determined in order to estimate excitability of the motor cortex of rabbits under basal conditions and under conditions where cortical excitability was enhanced by drugs (strychnine, caffeine, benzedrine). Close correlation of these data with electroencephalographic records obtained during rhythmical stimulation with flashes of light of increasing intensity shows that the "curves of reactivity" obtained provide a sensitive method of estimating levels of cortical excitability.—J. D. London.

5450. Loewenfeld, Irene E., & Altman, Ronald. (Columbia U., New York.) **Variations of Horsley-Clark coordinates in cat brains (with description of a stereotaxic instrument especially useful in neuro-ophthalmological work).** *J. Neuropath. exp. Neurol.*, 1956, 15, 181-189.—"A modified Horsley-Clarke stereotaxic instrument is described. The instrument is particularly useful in neuro-ophthalmological experiments such as the recording of pupillary motions and intraocular pressure. The heads of 16 freshly killed cats were inserted into this stereotaxic instrument and measurements were taken along the outlines of structures visible in a mid-sagittal cut. The arithmetic mean of selected landmark points was used to construct the outlines of an 'average cat's brain,' and, for each point, variations were tabulated. The individual variations were found to be considerable, and these results were borne out in another series of brains for which histological evidence was available. Therefore, for topographical localization, histological control is imperative."—M. L. Simmel.

5451. Machne, Xenia, & Segundo, J. P. **Unitary responses to afferent volleys in amygdaloid complex.** *J. Neurophysiol.*, 1956, 19, 232-240.—The following stimuli showed themselves capable of modifying the activity of units in the amygdaloid complex of curarized cats as recorded by microelectrodes:

single shocks delivered to the midbrain tegmentum, to the ipsi- and contralateral olfactory bulbs, vagus and sciatic nerves and tooth pulp; clicks; flashes; touch of various portions of the body; stretching of the gastrocnemius muscle. Sciatic stimulation and touch produced the most widespread response, followed by stretching of the gastrocnemius and shocks to the olfactory bulb. 18 references.—G. Westheimer.

5452. Masserman, Jules, & Pechtel, Curtis. (Northwestern U., Evanston, Ill.) **An experimental investigation of factors influencing drug action.** *Psychiat. Res. Rep.*, 1956, No. 4, 95-113.—A review is given of the effects of conflict situations, experimentally devised, upon normal and brain-operated monkeys and cats. The responses of these same animals when given alcohol, barbiturates, reserpine, and chlorpromazine are characterized. It is concluded that "it is impossible to state the effects of any drug on any organism without considering the latter's genetic characteristics, past experiences, biologic status, and perceptions about, motivations toward and evaluations of its current physical and social milieu." The question is raised as to how far "such qualifications and contingencies" are also true for human beings.—L. A. Pennington.

5453. Mushkina, N. A. **Reaktsiia elektricheskikh kolebaniy mozga na svetovye razdrazheniia, imeiushchie razlichnoe signal'noe znachenie.** (Reaction of electric waves of the brain to photic stimulations possessing differing signal significance.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6(1), 164-169.—Data on the suppression of the alpha-rhythm in various contexts involving conditioning are supplied. Verbal conditioning plays a great role in the suppressive reaction.—I. D. London.

5454. Olds, James. (McGill U., Montreal, Can.) **A preliminary mapping of electrical reinforcing effects in the rat brain.** *J. comp. physiol. Psychol.*, 1956, 49, 281-285.—Chronic implantations of electrodes in various parts of the rat brain were followed by behavioral tests of the reinforcing effects of self-stimulation by means of a bar-pressing response. Histological reconstruction showed that reinforcing effects were secured from electrodes located in the septal area, the amygdaloid complex and the anterior hypothalamus. Moderate reinforcing effects were also noted in animals with electrodes in the cingulate cortex, the hippocampus, the posterior hypothalamus and the anterior thalamus. Other areas either gave low operant levels (neutral reinforcing properties) or low response rates (negative reinforcement). The latter areas were the medial lemniscus, the zona incerta and parts of the tegmentum behind the medial geniculate.—L. I. O'Kelly.

5455. Perlin, Seymour. **Psychophysiological variables in the study of the effect of LSD-25 on cerebral blood flow and metabolism.** *Psychiat. Res. Rep.*, 1956, No. 3, 10-14.—A description of a research program in process of development is given.—L. A. Pennington.

5456. Regan, Peter F., III, & Browne-Mayers, Albert N. **Electroencephalography, frequency, and consciousness.** *J. nerv. ment. Dis.*, 1956, 124, 142-147.—A series of 10 psychiatric patients receiving insulin treatment were studied with periodic observation of their tested level of consciousness and of their EEG-frequency analysis patterns. Results

showed no distinctive EEG pattern during insulin-induced coma. Other features of EEG activity are described and discussed.—N. H. Pronko.

5457. Rinaldi, Franco. (State Res. Hosp., Galesburg, Ill.) **The experimental electroencephalographic approach to psychopharmacology.** *Psychiat. Res. Rep.*, 1956, No. 4, 1-10.—A review is given of the selective effects of drugs (reserpine, chlorpromazine, among others) upon the electrical activity of the brain. The major emphasis is given to the drugs' "changing the normal proportions of the resting pattern or the alert pattern." Electrical studies in combination with pharmacological investigations can therefore permit differentiation of one drug from another as to mode and site of action. 16 references.—L. A. Pennington.

5458. Robiner, I. S. **K fiziologicheskomu mekhanizmu deistviia impul'snogo toka maloī sily i nizkoī chastoty.** (On the physiological mechanism of action of low power and low frequency impulse current.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6(1), 146-156.—An investigation was conducted utilizing electroencephalography in combination with conditioned reflex methods and clinical observations. It is concluded that, regardless of the frequency of the impulse current, the brain tissue responds to it with its own optimal rhythm of excitation. The belief is expressed that low power and low frequency impulse current exerts a "parabiotic influence" on the brain tissue.—I. D. London.

5459. Schwarz, Bert E., Sem-Jacobsen, Carl W., & Petersen, Magnus C. (Rochester State Hosp., Minn.) **Effects of mescaline, LSD-25, and adrenochrome on depth electrograms in man.** *A.M.A. Arch. Neurol. Psychiat.*, 1956, 75, 579-587.—Administration of these drugs to 2 epileptic patients with psychosis and to 3 chronic schizophrenics indicated that, contrary to earlier studies, "striking changes" in the electrogram do occur. Mescaline and LSD-25 had a "pronounced quieting effect on the spike and sharp-wave foci" in the epileptic Ss. The schizophrenic Ss, however, showed an increase in paroxysmal activity. Injections of chlorpromazine reversed the effects. These and other results are discussed in relation to a possible "common mechanism."—L. A. Pennington.

5460. Sherman, John F. (Nat'l. Inst. Hlth, Bethesda, Md.) **Enhancement of the central nervous system effects of strychnine and pentobarbital by diphenhydramine.** *Science*, 1956, 123, 1170-1171.—"These studies demonstrate that diphenhydramine, at a single dosage level that, by itself, exerts no gross effect, can enhance the CNS activity of two compounds long recognized as being pharmacological antagonists." To account for results, two possible modes of action are suggested.—S. J. Lachman.

5461. Vediaev, F. P. **Nekotorye dannye k sravnitel'noi patofiziologii vyssheī nervnoi deiatel'nosti nizshikh zhivotnykh.** (Some data on comparative pathophysiology of higher nervous activity.) *Fiziol. Zh. SSSR*, 1956, 42, 1064-1071.—Experimentally produced failure of higher nervous activity was investigated in rabbits, pigeons, rats, and mice and discussed in terms of comparative physiology. After establishing conditioned alimentary motor and defensive motor reflexes, neurotic patterns of behavior were elicited by application of intense photic and

acoustic stimuli, as well as by setting up difficult situations in the conditioning process. It was found that the breakdown of higher nervous activity produced in pigeons and in rabbits was accompanied by a predominance of either excitatory or inhibitory processes. In rats and in mice, however, breakdown of higher nervous activity resulted in disorders of a more serious nature. In some of these animals pathological behavior patterns were accompanied by dyspnea, paralysis of the hind legs, cutaneous disorders, and emaciation.—I. D. London.

5462. Weiskrantz, Lawrence. (Inst. Living, Hartford, Conn.) Behavioral changes associated with ablation of the amygdaloid complex in monkeys. *J. comp. physiol. Psychol.*, 1956, 49, 381-391.—Following lesions to the amygdala and medial temporal pole or control lesions in the inferior temporal convexity or sham operations, the following behavioral effects of amygdalar lesions were noted: (1) increased tameness and lessening or disappearance of previously acquired fear responses, (2) more rapid extinction of conditioned avoidance, the response having been established preoperatively, (3) no differences in retention of avoidance behavior, but a slower acquisition rate which they shared with the temporal control animals. "It is suggested that the effect of amygdectomy is to make it difficult for animals to identify reinforcing stimuli." 18 references.—L. I. O'Kelly.

(See also abstracts 5277, 5502, 5525, 5575, 5634, 5710, 5730, 5741, 6251, 6321, 6421, 6483)

RECEPTIVE AND PERCEPTUAL PROCESSES

5463. Bartel, Allen H., & Davenport, Demorest. A technique for the investigation of chemical responses in aquatic animals. *Brit. J. anim. Behav.*, 1956, 4, 117-119.—An apparatus is described for testing chemical sensitivity of small aquatic animals. From a central chamber, radiating arms may be entered by the animals, who are trapped by the arm construction. Thus, by differentially "loading" the arms with respect to chemical stimulation factors, counts of the ultimate distribution of animals in the arms may be tested against the hypothesis of chance distribution. Sample data are presented.—L. I. O'Kelly.

5464. Bier, William C., DiMichael, Salvatore G., & McCall, Raymond J. (Eds.) (Fordham U., New York, N. Y.) Perception in present-day psychology; a symposium. New York: American Catholic Psychological Association, 1956. viii, 109 p. \$1.00.—A summary of perceptual research was presented by Marion Dolores and discussed by Magda B. Arnold; epistemological considerations of perceptual theory, John W. Stafford and discussed by Walter L. Farrell; implications of theoretical formulations and research on perception for experimental psychology, Mary E. Reuder; some preliminary perception experiments related to insight in counseling therapy, Charles A. Curran, and social implications of perception were discussed by Rudolph Allers.—G. K. Morlan.

5465. Brain, W. Russell. (London Hosp., Eng.) The thirtieth Maudsley lecture: perception and

imperception. *J. ment. Sci.*, 1956, 102, 221-232.—The philosophy of perception is important for the understanding not only of the anatomy of perceptual disorders, but also of art as the representation of feeling, of knowledge of the body, and of the relevance of hallucinations. The perceptual world is not identical with the physical world, but is a representation of it. The perceptual world is a construction of the brain of each individual and is private to him; moreover it incorporates sensory experience derived from the subject's body. 16 references.—W. L. Wilkins.

5466. Chessick, Richard D. The problem of time in philosophy, neurophysiology and psychiatry. *J. nerv. ment. Dis.*, 1956, 123, 14-17.—Four fundamental propositions about time are offered as a nucleus for the integration of some important thoughts about time in neurophysiology, psychiatry, and philosophy.—N. H. Pronko.

5467. Cohen, Walter. Comparisons of homogeneous Ganzfelds with Ganzfelds containing simple figures. *Dissertation Abstr.*, 1956, 16, 1510-1511.—Abstract.

5468. Eckstrand, Gordon A., & Morgan, Ross L. The influence of training on the tactual discriminability of knob shapes. *USAF WADC Tech. Rep.*, 1956, No. 56-8, iv, 16 p.—3 matched groups of 20 subjects each were tested on a task which required tactual discrimination among 4 similar knob shapes. Control (C) Group had no training, Tactual Name Group (T-N) Group was trained to associate "names" with the feel of the knobs, and Tactual (T) Group was given training only with the feel of the knobs. Errors and the time required for each discrimination were used as criteria. While all 3 groups improved their performance with practise the T-N Group was superior to C Group by both time and error and T Group was superior to C Group in terms of error.—R. T. Cave.

5469. Hill, Harris E. (USPHS Hosp., Lexington, Ky.) Studies on pain and analgesia. *Psychol. Rec.*, 1956, 6, 17-23.—The author reviews studies on pain and its relief by chemical agents. The evidence is considerable that "anxiety reduction is a necessary condition for the occurrence of analgesia."—P. Swartz.

5470. Johnson, W. H. Head movement measurements in relation to spatial disorientation and vestibular stimulation. *J. Aviat. Med.*, 1956, 27, 148-152.—"By attaching miniature rate gyroscopes to the head of subjects being exposed to complex motions such as occur in the laboratory, or in aircraft flight involving rough air or aerobatics, the resulting vestibular sensations can be computed both as to direction and magnitude. "A direct relationship has been found to exist between the time for recovery from a precessionally induced vestibular stimulus in the laboratory and incapacitating airsickness among air-crew."—J. M. Vanderplas.

5471. Jones, F. Nowell. (U. Calif., Los Angeles.) Space-time relationships in somesthetic localization. *Science*, 1956, 124, 484.—Stimuli were generated successively by a "two-shot" stimulator at various temporal intervals. A table is presented of results of the 2 subjects. "There is significant interaction of space and time, and increasing the interval reduces the separation necessary to produce the report of 'different place.'" The suggestion is made that space per-

ception in the pressure sense arises from the translation of spatial patterns in the primary cortex into temporal patterns in the association areas, which, if correct, "will be of considerable aid in clarifying the problem of the neurophysiological basis of perception."—S. J. Lachman.

5472. Jones, Margaret Hubbard. (U. Calif., Los Angeles.) **Second pain: fact or artifact?** *Science*, 1956, 124, 442-443.—"The phenomenon of 'double pain,' 2 temporally discrete and sometimes qualitatively different responses to a single noxious stimulus, has been reported intermittently for the past 75 years." An experiment is described which involved three successive attempts to elicit double pain. "It is significant that no experimenter has reported double pain with a single stimulus." "The best evidence of all varieties points to double pain as an artifact."—S. J. Lachman.

5473. Le Gros Clark, W. E. **Observations on the structure and organization of olfactory receptors in the rabbit.** *Yale J. Biol. Med.*, 1956, 29, 83-95.—The nature and anatomical variety of the receptors, as seen in silver preparations, are described. The findings are consistent with the view that the axonal processes of all receptors retain their individuality up to termination in the olfactory bulb. After bulbar lesions approximately 50% of the receptors degenerate; the possible significance of those that survive is discussed.—W. A. Wilson, Jr.

5474. Lele, P. P. **The mechanism of cutaneous sensibility.** *Brit. J. anim. Behav.*, 1956, 4, 120.—Abstract.

5475. Meade, Robert D. **Time perception as affected by motivational level, goal distance and rate of progress.** *Dissertation Abstr.*, 1956, 16, 1726.—Abstract.

5476. Meinecke, Georg. **Organisationstendenzen der wahrnehmungsnahen Reproduktion.** (Organizing tendencies in the reproduction of previously perceived objects.) *Z. exp. angewand. Psychol.*, 1955-56, 3, 684-692.—The same organizing tendencies which are active in perception (Gestaltfaktoren) determine also the reproduction from memory. Analogous tendencies can be observed in organic formations. English and French summaries.—W. J. Kopitz.

5477. Mulholland, Thomas Basil, Jr. **The effect of extraneous auditory stimulation on visual perception.** *Dissertation Abstr.*, 1956, 16, 1727.—Abstract.

5478. Murney, Robert J. **An investigation of the cognitive system principles of leveling and sharpening and their relationship to selected personality variables.** Washington, D. C.: Catholic University of America Press, 1955. 26 p. 50¢.—The purpose was to test the validity and generality of attitudes of leveling and sharpening. Ss were 20 college women scoring high (levelers) and 20 scoring low (sharpeners) out of 100 taking the Klein-Holzman 'schematizing' test. Results: (1) The assumption that leveling and sharpening provide a basis for predicting S's mode of response to perceptual tasks was confirmed. (2) The assumption that they involve a more complex function, reasoning, was not supported. (3) No relation of *l* and *s* to personality traits was revealed. 26 references.—M. O. Wilson.

5479. Murray, R. W. **Thermoreceptors.** *Brit. J. anim. Behav.*, 1956, 4, 120.—Abstract.

5480. Nyssen, R., & Bourdon, J. **A new contribution to the experimental study of the size-weight illusion.** *Acta psychol.*, 1956, 12, 157-173.—650 normal adults assayed the relative weights of 13 parallelepipeds of the same size, varying in weight from 500 to 1100 grams, with a small one weighing 500 grams. The size-weight illusion appeared in all except a few subjects; it exists not only when 2 equal weights are of different size, but also when the weight of the larger size is markedly superior. The most acceptable interpretation is one of acquired capacity to perceive, in an immediate phenomenal datum, the density of the lifted object. 42 references.—G. Rubin-Rabson.

5481. Ray, James Thomas. **A study of adaptation to tilt.** *Dissertation Abstr.*, 1956, 16, 1729.—Abstract.

5482. Richard, G. **Les organes sensoriels antennaires et le comportement de divers insectes.** (Antennal sensory organs and behavior of various insects.) *Brit. J. anim. Behav.*, 1956, 4, 121.—Abstract.

5483. Rosenblatt, Bernard Phillip. **The influence of affective states upon the body-image and upon the perceptual organization of external space.** *Dissertation Abstr.*, 1956, 16, 1721.—Abstract.

5484. Slifer, Eleanor H. (State U. Ia., Iowa City.) **The detection of odors and water vapor by grasshoppers (Orthoptera, Acrididae) and some new evidence concerning the sense organs which may be involved.** *J. exp. Zool.*, 1955, 130, 301-317.—The approach reactions of grasshoppers to water, dandelion leaves and wheat middlings was studied in an enclosed box. Normal water deprived grasshoppers approach water in a goal-gradient manner, but grasshoppers which have had their antennae amputated will not approach water placed nearby. This finding indicates that the antenna rather than the permeable basiconic pegs which are widely distributed over the grasshoppers' body function as hydroceptors. The latter organs appear sensitive to some but not all odors and are identified as receptors for common chemical sensitivity.—R. T. Davis.

5485. Urban, Hugh B. **A study of perceptual defense as a paradigm for repression.** *Dissertation Abstr.*, 1956, 16, 1496-1497.—Abstract.

5486. Vernon, Jack A., & Wessman, Alden. (Princeton U., N. J.) **The effect of phase manipulation upon electrocutaneous stimulation.** *J. comp. physiol. Psychol.*, 1956, 49, 293-296.—"Electrocutaneous interaction was produced by applying two isolated electrical circuits to the finger. The nature of the interaction was revealed by a threshold technique which utilized phase manipulation as its main variable. The summative or in-phase relationship was found to be an almost perfect interaction while the cancellation or out-of-phase relationship was found to be incomplete. The magnitude of cancellation was not as great as the magnitude of addition. The localization of the interaction threshold was found to depend upon the phase relationship between the two stimuli."—L. I. O'Kelly.

5487. Wright, Margaret R. (*Vassar Coll., Poughkeepsie, N. Y.*) **Persistence of taste organs in tongue transplants of *Triturus V. Viridescens*.** *J. exp. Zool.*, 1955, 129, 357-368.—Transplants of the tongue were made in the orbit of adult salamanders. Taste organs remained histologically normal in new site in spite of lack of innervation for periods up to 12.5 months after transplanting. Results are discussed in light of similar findings in lateral line organs of salamanders but contradictory findings on sense organs of fish and mammals.—R. T. Davis.

VISION

5488. Adams, Jack A. (*AF Personn. & Train. Res. Cent., Lackland AFB, Texas.*) **Vigilance in the detection of low-intensity visual stimuli.** *J. exp. Psychol.*, 1956, 52, 204-208.—Utilizing four groups (two brightness levels and two presentation times) found that the average number of stimuli detected was related to brightness and duration. All groups showed a decline in efficiency over the viewing period and a gain with rest. The short stimulus presentation times groups made a number of responses in the absence of the stimulus light.—J. Arbit.

5489. Ames, Adelbert, Jr. **Some characteristics of visual perception.** In Taylor, Richard W. (Ed.), *Life, language, law: Essays in honor of Arthur F. Bentley*. Yellow Springs, O.: The Antioch Press, 1957. pp. 93-108.—Several demonstrations are presented to illustrate the identifiable components which the perceiver contributes to his own perceptions. These psychological investigations reveal that perceivers do affect the what, where, when and how of that which they perceive.—L. N. Solomon.

5490. Arner, Robert S. (*Columbia U., New York.*), Berger, Sanford I., Braverman, Gustave, & Kaplan, Manuel. **The clinical significance of the effect of vergence on fixation disparity—a preliminary investigation.** *Amer. J. Optom.*, 1956, 33, 399-409.—"The present study attempts to provide a preliminary evaluation of a clinical utilization of fixation disparity." $N=35$. The effect of vergence on fixation disparity was measured quantitatively. Asthenopic symptoms were determined by a questionnaire. "The vergence range over which the fixation disparity did not exceed plus or minus ten minutes of arc, a clinically available determination had a correlation [rank order] of +0.44 with the asthenopic ranking. This correlation was significantly different from zero." 17 references.—T. Shipley.

5491. Aschan, Gunnar; Bergstedt, Martin; Goldberg, Leonard, & Laurell, Lars. (*U. Uppsala, Sweden.*) **Positional nystagmus in man during and after alcohol intoxication.** *Quart. J. Stud. Alcohol*, 1956, 17, 381-405.—Objective nystagmography shows that alcohol-induced nystagmus is positional. Subjective symptoms of intoxication, including headache, vertigo, nausea and vomiting, are closely related to intensity of recorded nystagmus. 31 references.—W. L. Wilkins.

5492. Baldwin, M. W., Jr., & Nielsen, G., Jr. (*Bell Telephone Labs, Murray Hill, N. J.*) **Subjective sharpness of simulated color television pictures.** *J. opt. Soc. Amer.*, 1956, 46, 681-685.—"This paper describes a visual experiment in which the observed variable is the subjective sharpness of a color

picture. The picture is produced by the superposition of primary color images from three projectors. The test picture corresponds, in general sharpness, to the grades of pictures that might be produced by existing or contemplated color television systems. The projectors are operated out of focus to achieve the moderate sharpness values required. The amount of defocus of each projector is expressed in equivalent television band width as part of the calibration. Many different ways of dividing up band width among the three primary colors are explored in determining the variation of picture sharpness."—F. Ratliff.

5493. Barlow, H. **Visual performance and the size of the vertebrate eye.** *Brit. J. anim. Behav.*, 1956, 4, 122.—Abstract.

5494. Barlow, H. B. (*Physiol. Lab., Cambridge, Eng.*) **Retinal noise and absolute threshold.** *J. opt. Soc. Amer.*, 1956, 46, 634-639.—"It is shown that the absorption of one quantum can excite a rod in the human retina, but that at least two, and probably many more, excited rods are needed to give a sensation of light. It is suggested that noise in the optic pathway limits its sensitivity, and this idea is subjected to an experimental test. The hypothesis is then formulated quantitatively, and shown to be able to account for the above experiment, and also the disagreement in the literature between those who believe that the absorption of two quanta can cause a sensation, and those who believe that 5 or more are required."—F. Ratliff.

5495. Berger, Curt. **Visual acuity decrease at various illuminations and role of reading.** *A.M.A. Arch. Ophthalmol.*, 1956, 55, 408-412.—A cumulative and significant decrease of visual acuity (average slope about 18%) in the course of repeated series of monocular measurements with Landolt's broken circle is described. Various levels of illumination and intervals of half-hour reading had no unequivocal significant influence. After 5 minutes' rest in the dark, the loss was partly or totally recovered. The possible relation of these facts to the etiology of myopia is discussed, and it is suggested that the nature of the restitution process may be the key to a new theory of the origin of myopia. Reading and other visual tasks may hinder restitution, thus contributing to the development of nearsightedness.—S. Renshaw.

5496. Boberg-Ans, Jørn. **On the corneal sensitivity.** *Acta ophthalmol., Kbh.*, 1956, 34, 149-162.—A device is described for pressing a stiff nylon thread against the cornea with known force to determine the touch threshold. Sensitivity curves showing recovery from local anesthesia are presented, and the inferiority of an air-puff as a test stimulus is demonstrated.—M. M. Berkun.

5497. Bowyer, Ruth. **The psychology of space perception.** *Spec. Sch. J.*, 1956, 45(2), 22-26.—The development of spatial perception from birth to 10 years is discussed; special difficulties of brain-damaged persons have revealed many facts about space perception. The author describes these difficulties and how some of them may be overcome.—(Courtesy of Rehab. Lit.)

5498. Boynton, Robert M., & Bush, William R. (*U. Rochester, N. Y.*) **Recognition of forms against a complex background.** *J. opt. Soc. Amer.*,

1956, 46, 758-764.—"In this experiment, observers were repeatedly presented with a background array of curvilinear forms, among which a 'critical target' was present 50% of the time. The critical targets consisted of one or another of 5 examples of 6 geometrical forms, all with straight sides and sharp corners, any one of which was equally likely to appear in any part of the visual field. Probability of correct recognition was determined as a function of the number of background forms, viewing time, visual angle, and form density. Forms were selected on the basis of a preliminary experiment in which basic recognition data were gathered on 240 different forms."—F. Ratliff.

5499. Brock, F. W. Visual training. Part III. The problems pertaining to the loss of binocular vision. *Optom. Wkly.* 1956, 47, 1065-1067; 1155-1158.—The Polaroid-Fly in Vectograph form was employed as a test for stereoscopic vision in young children. Techniques involving the continuous change in disparity are discussed. Some differences in size-distance judgments and reaching movements are reported, in very young children, between the crossed and uncrossed disparity situations.—T. Shipley.

5500. Brown, Kenneth T. (Brown U., Providence, R. I.) A simple method of demonstrating differences in the critical flicker frequency of foveal and peripheral vision. *Amer. J. Psychol.*, 1956, 69, 303.—The method involves the use of a cathode ray oscilloscope equipped with an expanded sweep so that both the foveal and peripheral retina are stimulated. With suitable adjustments visual flicker may disappear at the fixated end of the line and still be present at the other.—R. H. Waters.

5501. Bykov, A. L. Labilnost' odinichaykh funktsionalnykh elementov setchatki nekotorykh mlekoopitaiushchikh. (Lability of single functional units of the retina in some mammals.) *Fiziol. Zh. SSSR*, 1956, 42, 1011-1020.—Reactions of single functional units to flickering light were investigated by means of recording action potentials of retinal ganglion cells in the cat, guinea pig, and rabbit. It was found that the retina reacts to rhythmic light stimulation by an increase in latency of the on-effect and a decrease in latency of the off-effect, as compared with effects produced by stimulation with single flashes of the same duration. These changes in latency are greater with higher flicker frequencies. In the cat, changes in CFF were observed in a number of retinal units when varying the intensity of flickering light. Increase in intensity of flashes produces a "brief increase of CFF (lability) of the off-effects." Besides these units with "variable" CFF, other units have been found in the cat's retina, where lability is more or less "stable."—I. D. London.

5502. Chang, Hsiang-Tung. Fiber groups in primary optic pathway of cat. *J. Neurophysiol.* 1956, 19, 224-231.—Action potentials of the optic nerve were produced by stimulation of the optic tract in cats under nembutal anesthesia. Three peaks were found indicating the presence of 3 groups of fibers, conducting at velocities of 70 m, 30 m, and 17 m/sec. resp. No interconnection between the tracts on either side is indicated. Differences were found between the crossed and uncrossed fibers.—G. Westheimer.

5503. Coleman, Paul D., & Krauskopf, John. The influence of high intensity noise on visual

thresholds. *US Army med. Res. Lab. Rep.*, 1956, No. 222, ii, 26 p.—Visual thresholds taken during noise and quiet conditions were not significantly different. Variation in the noise intensity between 110 db (re .0002 dynes/cm²) and 140 db failed to produce any significant effect on visual thresholds. Thresholds of individual subjects, however, were changed significantly during the noise condition. Some subjects had higher thresholds during noise, others had lower thresholds. The subjects' thresholds during noise appeared to be influenced by spurious information about previous performances during noise.

5504. Collins, J. B. The role of a sub-harmonic in the wave-form of light from a fluorescent lamp in causing complaints of flicker. *Ophthalmologica*, 1956, 131, 377-387.—100 cycle fluctuation gives negligible complaints of flicker unless luminance levels are higher than in normal lighting practice. Some lamps have a small 50 cycle fluctuation superimposed on the 100 cycle one. The presence of these subharmonics "is likely to be sufficiently common to account for the majority of genuine complaints which have arisen." German and French summaries.—S. Renshaw.

5505. Crouzy, Raymond. Au sujet de la variation du seuil différentiel successif de luminance, en fonction de la luminance, dans le domaine scotopique. (Variation in the successive differential luminance threshold as a function of luminance in the scotopic region.) *C. R. Acad. Sci., Paris*, 1956, 243, 920-923.—"Measurements have been made in white light, with successive unilocal presentations, and continued to the level of the absolute threshold. The results were: 1. A minimum contrast threshold for a scotopic luminance of about 2.10^{-6} cd/m²; 2. For certain luminance intervals, linear relationships between $\Delta L/L$ and $\log L$; 3. A continuous decrease in ΔL as L decreases to the absolute threshold."—R. W. Burnham.

5506. Deutsch, J. A. (U. Oxford, Eng.) The statistical theory of figural after-effects and acuity. *Brit. J. Psychol.*, 1956, 47, 208-215.—Osgood & Heyer's theory of figural aftereffects is criticized, as is also the neurophysiological basis for the theory. "Various amendments are considered . . . [and] . . . a hypothesis to explain figural after-effects and the after-effects of seen movement is briefly suggested." 21 references.—L. E. Thune.

5507. Dodwell, P. C. Some effects of pre-training on subsequent shape discrimination in rats. *Brit. J. Anim. Behav.*, 1956, 4, 81.—Abstract.

5508. Ex, J., & De Bruijn, G. L. An experimental study on the influence of the mental set on the perception of identity and substitution. *Acta psychol.*, 1956, 12, 198-207.—If a subject is shown a simple line-figure and this figure is substituted tachistoscopically by a second one, the impression upon the subject of the shift from one figure to the other will be influenced by the subject's mental set. Whether in these experiments substitution or identity was perceived appeared to be co-dependent on the subject's mental set. The subject can perceive one structure or the other at will. The way he experienced the shift of the first figure to the second changed with this mental set.—G. Rubin-Rabson.

5509. Fields, P. E., Adkins, R. J., Carney, R. E., & Finger, G. L. (U. Washington, Seattle.) The

reaction of young silver salmon and steelhead trout to infrared light barriers. *Univ. Wash. Sch. Fish. Tech. Rep.*, 1955, No. 14, 1-8.—Nine groups of 25 silver salmon (*Oncorhynchus kisutch*) and 4 groups of 25 steelhead trout (*Salmo gairdnerii*) approximately one year old were tested for guidance in an experimental flume with water velocities of 3.9 and 1.5 fps., with 3 different amounts of infrared light behind a 20° angled light barrier. It was concluded that the fish either were not sensitive to infrared light at the 3 intensities used, or they were not repelled by it. The positive guiding response to commercial infrared heat lamps was attributed to the presence of visible light. When infrared filters were placed over them the guiding response disappeared.—P. E. Fields.

5510. Fields, Paul E., & Finger, Gary L. (U. Washington, Seattle.) The reaction of five species of young Pacific salmon and steelhead trout to light. *Univ. Wash. Sch. Fish. Tech. Rep.*, 1954, No. 7, 1-24.—The sounding and lateral displacement of young hatchery raised and/or wild fish of all species of Pacific Coast salmon and steelhead trout were studied. The distribution in the direct rays from electric lamps placed over and adjacent to the 2 ends of a glass front aquarium were analyzed. In general all species of downstream migrants showed a statistically significant preference for the darker portion of the light gradient. There was some evidence that chinook fry reared inside a hatchery had been conditioned to approach the light. The aggregation in the beam of a flashlight exhibited by some fry and fingerlings was related to the previous level of light adaptation.—P. E. Fields.

5511. Fields, P. E., & Finger, G. L. (U. Washington, Seattle.) The reaction of young salmonidae to light. *Univ. Wash. Sch. Fish. Tech. Rep.*, 1954, No. 2, 1-20.—This report describes the guidance of chinook, silver and sockeye salmon, (*Oncorhynchus tshawytscha*, *O. kisutch*, and *O. nerka*) and steelhead and cutthroat trout (*Salmo gairdnerii* and *S. clarkii*) of over 70 mm. fork length with various intensities of light in a 2-choice experimental raceway using still water. Under these conditions 90% of over 1000 young salmonidae were successfully deflected into a dark channel by means of an angled barrier of light from a variety of sources ranging from high intensity photoflood lamps down to ordinary 100 watt electric lamps and gasoline lanterns.—P. E. Fields.

5512. Fields, P. E., Finger, G. L., & Adkins, R. J. (U. Washington, Seattle.) The effect of electric lights upon the upstream passage of three species of adult salmon through the University of Washington fishladder. *Univ. Wash. Sch. Fish. Tech. Rep.*, 1955, No. 12, 1-13.—A 64-foot covered approach to the University of Washington fishladder was wired so that electric lights underneath the plywood panels could be turned on and off on alternate nights (5 p.m. to 8 a.m.) during the adult salmon runs. All species displayed a statistically significant preference for entering during the night over the day, and for dark nights over light nights (sockeye, 41 on dark nights, 1 on light nights and 0 in the daytime). Sockeye were significantly more sensitive to light than either silvers or chinooks, with no significant difference between the latter 2 species.—P. E. Fields.

5513. Fields, P. E., Finger, G. L., Adkins, R. J., Carney, R. E., & Pyke, R. (U. Washington, Seattle.) A factorial study of the response of steelhead trout, chinook and silver salmon fingerlings to light barriers in moving water. *Univ. Wash. Sch. Fish. Tech. Rep.*, 1955, No. 11, 1-11.—A total of 72 groups each containing 50 yearling steelhead trout or chinook or silver salmon were tested in a factorial study with light barriers. The effectiveness of the light barrier was greatest at the lowest barrier angle, the lowest water velocity, and the highest level of illumination. There was a significant species difference, with steelhead being most and chinook least sensitive to light. An additional 27 groups of all 3 species were tested on 3 intermediate velocities, and the number of failures increased as the velocity increased, although not in the same ratio.—P. E. Fields.

5514. Fields, P. E., Finger, G. L., Adkins, R. J., & Pyke, R. (U. Washington, Seattle.) Factors influencing the efficiency of light barriers in the guidance of young salmonidae. *Univ. Wash. Sch. Fish. Tech. Rep.*, 1954, No. 8, 1-25.—The experimental facilities of a new fish behavior laboratory are described. In a series of 7 factorial experiments the reactions of 90 different groups of 25 hatchery reared yearling silver salmon (*Oncorhynchus kisutch*) were tested in an experimental flume to a light barrier in every combination of 3 angles and 3 brightness levels, in water with 3 depths and 4 velocities. Significant results are indicated.—P. E. Fields.

5515. Fields, P. E., Finger, G. L., & Verhoeven, L. A. (U. Washington, Seattle.) The effect of electric shock upon the light avoiding behavior of young silver and blueback salmon. *Univ. Wash. Sch. Fish. Tech. Rep.*, 1954, No. 3, 1-19.—This study is concerned with the response to light of 87 and 227 mm. silver salmon (*Oncorhynchus kisutch*) and 89 and 157 mm. blueback salmon (*O. nerka*). The light avoiding behavior of all shocked fish was adversely affected immediately after shocking. Only the largest fish exposed to the heaviest shock were significantly affected 24 hours later. Immediate mortality was related to the size of the fish and the amount of the shock. During the period from one to 60 days postshock there was no increased mortality or decreased efficiency in the light avoiding response which could be attributed to the electric shock.—P. E. Fields.

5516. Fischer, Gloria J. (Purdue U., Lafayette, Ind.) Factors affecting estimation of depth with variations of the stereokinetic effect. *Amer. J. Psychol.*, 1956, 69, 252-257.—Factors determining the amount of perceived depth when plane figures (circles) are attached to a rotating disk are the amount of off-set of the circles and monocular viewing of the pattern. An explanation of the stereokinetic effect in terms of physical and experiential factors is offered.—R. H. Waters.

5517. Foley, P. J. Evaluation of angular digits and comparisons with a conventional set. *J. appl. Psychol.*, 1956, 40, 178-180.—"A new set of digits designed to make maximum use of easily discriminated forms was studied. Data on confusion errors are given. The legibility of the new digits is not independent of whether they are presented as black ground. At low illumination levels white on black is more legible, the reverse being true at high illumina-

nation levels. Comparisons with a conventional set, the Mackworth digits, at different illumination levels, exposure times, and angles of view, show the new set to be significantly more legible under all of these conditions."—P. Ash.

5518. Fraise, P., & Vautrey, P. The influence of age, sex, and specialized training on the vertical-horizontal illusion. *Quart. J. exp. Psychol.*, 1956, 8, 114-120.—This illusion was studied in 2 forms. "In Figure A, the vertical is a short distance away from the horizontal; in Figure B, the vertical meets the horizontal segment at its mid-point. . . . When time is unlimited, Illusion A increases up to 9-10 years and then remains constant and Illusion B decreases as a function of age and chiefly as a function of the degree of scientific training. The illusions are stronger in tachistoscopic perception than under conditions of unlimited exposure. Both illusions also increase in tachistoscopic perception with age except for science students. Under condition of unlimited time, women have stronger illusions than men. This difference does not occur in tachistoscopic perception."—M. J. Wayner, Jr.

5519. Gardner, R. W., Holzman, P. S., & Siegal, R. S. (Menninger Foundation, Topeka Kans.) Some variables affecting size judgments. *Percept. Mot. Skills*, 1956, 6, 285-290.—20 Ss judged the sizes of 4 gray cardboard disks normal to the line of regard, in a tilted position, in "serial" order, and in "counterbiased" order. The results indicate the necessity for careful control of several variables basic to size estimation situations before attribution of size distortions to the influence of value or need.—C. H. Ammons.

5520. Gogel, Walter C. Relative visual direction as a factor in relative distance perceptions. *Psychol. Monogr.*, 1956, 70 (11), (No. 418), 19 p.—Two separate experiments were undertaken. The first "to illustrate and extend the evidence relating to 2 previously formulated hypotheses (binocular hypothesis and monocular hypothesis) involving visual direction." The second with "the applicability of the hypotheses to fairly complex visual situations were used in predicting the apparent path of movement of a small object attached to the Ames rotating trapezoidal window" which was viewed "either monocularly or binocularly, with four conditions of attaching the small object to the window." The results appear to confirm a group of predictions made from the two hypotheses.—M. A. Seidenfeld.

5521. Hambacher, William O. An experimental investigation of whiteness constancy with suggestions for an explanatory approach. *Dissertation Abstr.*, 1956, 16, 1724.—Abstract.

5522. Hirsch, M. J. The variability of retinoscopic measurements when applied to large groups of children under visual screening conditions. *Amer. J. Optom.*, 1956, 33, 410-416.—The reliability of a group technique for retinoscopic determinations is examined. The technique uses a ". . . lens bar while the child observes a motion picture through convex lenses." N = 36 test-retests. The s.d. of the differences (in diopters) between test and retest is 0.34D. A difference of as much as 0.75D may be expected to occur between two measures on the same individual at the 1% level of confidence. The reliability over two measurements (different E's) was

+ 0.69; over two eyes + 0.90 (same E's). A tendency, for examiners to equalize the refractive state of the two eyes, is noted.—T. Shipley.

5523. Hopkinson, R. G. Glare discomfort and pupil diameter. *J. opt. Soc. Amer.*, 1956, 46, 649-656.—"A limited study has shown that the diameter of the pupil of the eye is not related directly to the sensation of discomfort which results from a bright light source in the field of view. Other factors, especially the illumination received at the eye, govern the pupil diameter. The more concentrated the source producing the illumination at the eye, the greater the contraction of the pupil. When the eye is subjected to intolerable glare, the pupil not only contracts, but varies in diameter, dilating and contracting irregularly every few seconds. The study indicates that the pupil diameter by itself cannot be used as an objective indicator of the degree of glare discomfort."—F. Ratliff.

5524. Jeeves, Malcolm A., & Bruner, Jerome S. Directional information and apparent movement. *Quart. J. exp. Psychol.*, 1956, 8, 107-113.—Studying ". . . directional information and the threshold between apparent movement and apparent successiveness . . . thresholds were obtained under conditions where movement could occur in either 8 directions or only in 2 directions, better and more persistent movement being found under the former conditions. But this result is obtained only when one measures thresholds by an ascending method: increasing the time separation between light points from optimal movement to successiveness." Results are explained in terms of "attentional disarticulation."—M. J. Wayner, Jr.

5525. Lennox, Margaret A. (U. Copenhagen, Denmark.) Geniculate and cortical responses to colored light flash in cat. *J. Neurophysiol.*, 1956, 19, 271-279.—Cats under chloralose-urethane anesthesia had lights flashed in their eyes and recordings were obtained from the optic cortex, from the retina and from the lateral geniculate body. The light was variable with respect to color and intensity. Color stimuli at such intensities that the response latencies at the geniculate were the same gave different latencies at the cortex. Cortical latencies varied inversely with the wavelength. Color stimuli equated for amplitude of retinal response also gave equal posterior and mid optic cortex response, but red stimuli gave lower amplitude responses at the geniculate and anterior cortex.—G. Westheimer.

5526. Linhart, William O. Field findings in functional disease; report of 63 cases. *Amer. J. Ophthalm.*, 1956, 42, 75-84.—A report of 63 case studies showing field changes found in hysteria, psychoneurosis and chronic fatigue states includes tabulation of findings with representative field charts of selected cases.—D. Shad.

5527. Linschoten, J. Strukturanalyse der binokularen Tiefenwahrnehmung; eine experimentelle Untersuchung. (Structure analysis of binocular depth perception; an experimental study.) Groningen, Netherlands: J. B. Wolters, 1956. (New York: Gregory Lounz.) xix, 573 p. \$10.00.—The physiological and psychological processes involved in binocular vision are explained and demonstrated in experiments. The pertinent theories of Muller, Hering, Hillebrand, Helmholtz and others as well as the

phenomenon called "Paum-effect" are discussed. The application and validity of the Gestalt-theory as expounded by Köhler, Koffka, Lewin, Werner and others are also dealt with. A booklet of 59 pages is attached, containing photographs and schematic representations of the experiments.—*M. Antalfy.*

5528. MacAdam, D. L. (*Eastman Kodak Co., Rochester, N. Y.*) **Chromatic adaptation.** *J. opt. Soc. Amer.*, 1956, **46**, 500-513.—"The dependence of corresponding colors on different chromatic adaptations has been studied by a method of local adaptation. Both eyes were exposed simultaneously to the same colors. Observations of one second duration were alternated with adaptation periods of nine seconds duration. The colors which appeared to match under these conditions [of the experiment] were compared with the predictions of Von Kries's trireceptor coefficient law. Various modifications of that law were tried. . . . An hypothesis of five different receptors whose responses are merged onto three channels in the nervous system was found adequate to account for almost all of the experimental findings. . . ."—*F. Ratliff.*

5529. MacBrayer, C. T. (*Davidson Coll., Mooresville, N. C.*) **Improved perception of a pseudo-isochromatic test by anomalous trichromats.** *Percept. Mot. Skills*, 1956, **6**, 237-240.—10 anomalous trichromats, given daily chromatic light retinal stimulation, became able to give all normal responses to a pseudo-isochromatic test within 3 to 7 trials, these trials occurring every fifth day. Only 1 of the 5 anomalous trichromats in a control group, which had identical trials but no daily chromatic light stimulation, achieved an errorless pseudo-isochromatic test score within the 5 trials given. This improvement was probably due to perceptual training. The difference in pseudo-isochromatic test performance between experimental and control groups was explained in terms of differential motivation.—*C. H. Ammons.*

5530. Macrae, Donald S. **San Jose's approach to occupational vision testing.** *Publ. Personnel Rev.*, 1956, **17**, 129-131.—A vision examination is part of the medical examination required periodically for all employees in addition to the pre-employment exam given to applicants. 8 visual profiles were developed which covered all of the 195 class specifications currently included in the city's classification plan. The visual skills examined for are the distance and near vision acuities, the phorias, depth perception and color vision. The author recommends the Ortho-Rater as superior to the old method of wall chart testing for the acuities.—*A. J. Spector.*

5531. Marriott, F. H. C. (*U. Lab. Physiology, Oxford, Eng.*) **Frequency-of-seeing curves and spontaneous excitation.** *J. opt. Soc. Amer.*, 1956, **46**, 661.—It is concluded that a background of spontaneous retinal excitation could only have the effect of reducing the slope of frequency-of-seeing curves.—*F. Ratliff.*

5532. Micko, Hans Christoph. **Untersuchungen der Tiefensehschärfe für grössere Entfernungen.** (Depth perception at greater distances.) *Z. exp. angewand. Psychol.*, 1955-56, **3**, 530-538.—Using the 2-rods method, depth-perception was determined for distances at 25, 50, 100, 150 and 200 meters. The minimum of perceptible binocular parallax was between 3 and 4 seconds, the minimum perceptible

depth discrimination of the 2 rods increased with the square of their distance from the observer. English and French summaries.—*W. J. Koppitz.*

5533. Miles, Raymond C., Ratoosh, Philburn, & Meyer, Donald R. (*Ohio State U., Columbus.*) **Absence of color vision in guinea pig.** *J. Neurophysiol.*, 1956, **19**, 254-258.—This experiment was designed to evaluate the hue discriminative capacity of the guinea pig. 4 guinea pigs were trained to press a lever to obtain a food reinforcement, and a circle of light was projected upon the lever. The hue and luminance of this patch were varied with filters. In 2 animals, through differential reinforcement, a discrimination of brightness was established. 2 other animals failed to discriminate red from green or green from blue. The data support the prediction of the duplicity theory that animals whose eyes contain rods alone are color-blind, and are not in accord with the contention that the guinea pig modulators are receptive elements for hue.—*G. Westheimer.*

5534. Motokawa, K., Nakagawa, D., & Kohata, T. (*Tohoku U., Japan.*) **Electrophysiological studies of binocular stereoscopic vision.** *J. comp. physiol. Psychol.*, 1956, **49**, 398-403.—Measuring induction by electrical stimulation of the red-adapted eye, the effects on induction of viewing figures through a stereoscope were studied. "It was found that a 'nearness' and a 'farness' sensation are associated with a decrease and an increase in retinal induction, respectively, just as in the monocularly stereoscopic vision." Binocular rivalry was related to too great a disparity between the fields of retinal induction in the two eyes. "From the results given above and the known histological evidence of efferent fibers in the optic nerve, efferent control of the retina was suggested, and the data concerning retinal induction were interpreted in the light of the servomechanism involved in coordinated visual function."—*L. I. O'Kelly.*

5535. Motokawa, K., Nakagawa, D., & Kohata, T. (*Tohoku U., Japan.*) **Monocular stereoscopic vision and gradients of retinal induction.** *J. comp. physiol. Psychol.*, 1956, **49**, 392-397.—Electrostimulation of the human eye while red-adapted and at various points after viewing test figures containing monocular depth cues showed that "a part of an 'eclipsed' figure appearing farther away showed a higher value of induction than another part appearing nearer." Similar gradients were found in figures showing linear perspective, in the phenomenon of figural after-affect and in whatever segment of an ambiguous figure that appeared farther. 14 references.—*L. I. O'Kelly.*

5536. Nakshian, Jacob Sarkis. **An investigation of the effects of red and green surroundings on behavior.** *Dissertation Abstr.*, 1956, **16**, 1727.—Abstract.

5537. Novikova, L. A., & Sokolov, E. I. **K metodike issledovaniia retinogrammy u cheloveka.** (On a method of investigating retinograms in man.) *Zh. vyssh. nervn. Deiatel.*, 1956, **6**(1), 170-174.—The new method, "which is distinguished for its simplicity," permits greater employment of electroretinography for study of the visual analyzer. Simultaneous registration of electroretinograms and electrograms of the muscles surrounding the eyes permits one to distinguish electric potentials, arising from

the retina, from those connected with the movement of the eyeball and blinking. The application of rhythmic photic stimulation facilitates the registration and analysis of electroretinograms.—*I. D. London.*

5538. Parks, Marshall M. Strabismus: review of the literature for 1955. *A.M.A. Arch. Ophthalmol.*, 1956, 56, 138-159.—Developments on problems of squints from 116 papers include the following topics: Basic science literature, sensory complications, including amblyopia, suppression, abnormal retinal correspondence; motor complications; heterophoria; accommodation and non-accommodative esotropia; fixation disparity; divergent strabismus; horizontal and vertical squint.—*S. Renshaw.*

5539. Prince, Jack H. (Ohio State U., Columbus.), & Fry, Glenn A. The effect of errors of refraction on visual acuity. *Amer. J. Optom.*, 1956, 33, 253-373.—"The immediate purpose of this investigation has been to establish an accurate basis for the interpretation of visual acuity measurements made with a 'test chart' consisting of Landolt rings with their breaks in various directions." The subject's acuity was first corrected; refractive errors were then simulated by adding spheres and cylinders to their distance corrections. Suggestions are made as to how to best interpret acuity measurements under such conditions.—*T. Shipley.*

5540. Ronchi, Vasco. (Nat. Inst. Optics, Arcetri, Italy.) Optics; the science of vision. New York: New York University Press, 1957. ix, 360 p. \$10.00.—A summary statement of the author's concept of the "true optics," the science of vision "... which utilizes the human eye as the means of detecting the radiation." This is to be distinguished from photoelectricity and from photography, which use entirely different detectors. "... [A]ny discussion of ... radiation ... without reference to the means of detection, clearly takes on a completely hypothetical and conventional character." In first person, the author presents a short history of the science, and elaborates its current form in the context of this point of view.—*T. Shipley.*

5541. Rutschmann, J. Bemerkungen über mögliche Korrelationen zwischen visuellen Perzeptionen und elektrischen Phänomenen der Sehrinde. (Notes about possible correlations between visual perceptions and electrical phenomena of the visual cortex.) *Z. exp. angewand. Psychol.*, 1955-56, 3, 539-546.—A review of the literature suggests the following hypotheses: Non-pathological perceptions without adequate stimulation of the retina may be related to spontaneous cortical activity. Under suitable conditions a direct electrical stimulation of the occipital cortex may be followed by after-images. 21 references. English and French summaries.—*W. J. Koppitz.*

5542. Seedorf, H. H. Effect of alcohol on the motor fusion reserves and stereopsis as well as on the tendency to nystagmus. *Acta ophthalmol., Kbh.*, 1956, 34, 273-280.—All 7 subjects had nystagmus (indicated by Frenkel's glasses) during as well as long after alcohol intake. Intoxication produced esophoria, failing stereopsis (indicated by inability to fuse two pairs of lines with unequal distances between the members of a pair), and reduced fusion reserve

(muscle balance). Increasing blood alcohol levels reduced retinal rivalry.—*M. M. Berkun.*

5543. Siegman, Aron W. (Teachers Coll., Columbia U., New York.) Some factors associated with the visual threshold for taboo words. *J. clin. Psychol.*, 1956, 12, 282-286.—Visual threshold for taboo words was studied in the 27 members of two elementary psychology classes who rated all of the taboo words (T) unpleasant, none of the neutral words (N) unpleasant and who were familiar with all the words. Though the mean threshold for T was higher than for N, the difference was not significant since some S's had raised, some lowered their thresholds. Those with raised thresholds recalled significantly more T than N words than did those with lowered thresholds. The Taylor score of S's with raised thresholds was significantly lower than that for S's with lowered thresholds. There was a significant negative *r* between self-esteem as measured on 14 items and S's differential threshold. 78 per cent of the S's admitted they withheld taboo responses.—*L. B. Heathers.*

5544. Slack, Charles W. Familiar size as a cue to size in the presence of conflicting cues. *J. exp. Psychol.*, 1956, 52, 194-198.—Confirmed the hypothesis that familiar size plays a significant role in the determination of apparent size even in the presence of many other conflicting cues such as gradients, binocular cues, and others. These findings are related to theories of size constancy in that they show that constancy is in part a regression toward past experience.—*J. Arbit.*

5545. Squires, Paul C. Stereopsis produced without horizontally disparate stimulus loci. *J. exp. Psychol.*, 1956, 52, 199-203.—A depth experience may be evoked by stimulus configurations that are only phenomenally disparate with no geometric-physical horizontal disparation being present. Stereoscopic depth may be regarded as the successful outcome of configurational struggle.—*J. Arbit.*

5546. Taguti, Ryuzabura, & Sato, Masako. Sur l'emploi d'une fonction exponentielle pour établir une échelle uniforme de chromaticité. (On the use of an exponential function to establish a uniform chromaticity scale.) *C. R. Acad. Sci. Paris*, 1956, 243, 654-656.—An attempt has been made to produce a color specification space in which visual intervals are uniformly represented. Exponential relationships are expressed which, it is said, give results comparable to those found in the color space earlier derived by E. Q. Adams.—*R. W. Burnham.*

5547. Taylor, J. G., & Papert, S. A theory of perceptual constancy. *Brit. J. Psychol.*, 1956, 47, 216-224.—"A terminology is developed for perceptual constancy which permits useful mathematical treatment. ... It is suggested that constancy can be established by conditioning each element of an 'equivalence class' of states of stimulation to the same group of responses. ... Experimental results on protracted wearing of distorting spectacles are reported and discussed in light of the above principles."—*L. E. Thune.*

5548. Thines, G. A note on the light sensitivity of blind cave fishes. *Brit. J. anim. Behav.*, 1956, 4, 79.—Abstract.

5549. Toch, Hans H., & Ittelson, William H. (Princeton U., N. J.) **The role of past experience in apparent movement: a revaluation.** *Brit. J. Psychol.*, 1956, **47**, 195-207.—"An attempt is made to provide a theoretical framework within which data concerning the effect of stimulus connotations on perceived movement might be evaluated. It was possible to demonstrate that loading through meaning, to be effective, had to be compatible with generalized past experiences with movement, or . . . with physiological mechanisms underlying movement perception." 29 references.—L. E. Thune.
5550. Upholt, William M., Quinby, Griffith E., Batchelor, Gordon S., & Thompson, James P. **Visual effects accompanying TEPP-induced miosis.** *A.M.A. Arch. Ophthalmol.*, 1956, **56**, 128-134.—"Pilots and others have long recognized the miosis which is frequently a consequence of applying tetraethylpyrophosphate (TEPP) dust by aircraft. Accompanying the miosis, operating pilots have regularly noted a decrease in light perception and have more rarely experienced an inability to judge distance. It is concluded that infrequent unilateral contamination of the eye by spillage or other accident, accounts for the occasional inability of pilots applying TEPP to judge distance adequately. The incoordination which may accompany such inability to judge distance may be a serious threat to the pilots."—S. Renshaw.
5551. Walls, Gordon L. (U. California, Berkeley.), & Heath, Gordon G. **Neutral points in 138 protanopes and deutanopes.** *J. opt. Soc. Amer.*, 1956, **46**, 640-649.—"Neutral points have been found by means of a rotary mixer and Munsell papers, minimizing any dispersion of individual values by individual ocular pigmentations. Determined thus, the Illuminant C values for 39 new (post-Walls-Matthews) protanopes covered a range of 3.7 μ with the mean at 492.3 μ , those for 38 new deutanopes a range of 5.8 μ with the mean at 498.4 μ . Illuminant D values for 13 additional protanopes covered a range of only 3.3 μ with the mean at 490.3 μ , those for 15 recent deutanopes a range of only 5.1 μ with the mean at 496.2 μ ."—F. Ratliff.
5552. Young, J. Z. (Univ. Coll., London.) **Visual responses by octopus to crabs and other figures before and after training.** *J. exp. Biol.*, 1956, **33**, 709-729.—An octopus tends to attack small objects moving in the visual field. The probability of attacking a given object can be raised by food reinforcement and lowered by the delivery of electric shock. These kinds of learning can still take place after removal of the vertical lobe, but in an impaired fashion.—B. Weiss.
5553. Zajaczkowska, A. (U. Coll., London, Eng.) **Experimental determination of Luneburg's constants σ and K.** *Quart. J. exp. Psychol.*, 1956, **8**, 66-78.—Two personal constants enter into the Luneburg, non-Euclidean hyperbolic, geometrical description of binocular subjective space. "The constants σ and K were determined experimentally for 30 untrained observers by Luneburg's 3- and 4-point tests. All values found for K were negative and support the hypothesis that the geometry of binocular space is hyperbolic."—M. J. Wayner, Jr.
5554. Zajaczkowska, A. (U. Coll., London, Eng.) **Experimental test of Luneburg's theory. Horopter and alley experiments.** *J. opt. Soc. Amer.*, 1956, **46**, 514-527.—The observed distances of the straight-line horopters agreed with values predicted within certain limits of confidence. The predictions concerning the shapes of concave and convex horopters and the shapes of alleys tended to hold in the case of observers of good depth perception and a relatively low absolute value of K. The measure of agreement obtained in the experiments reported gives considerable support for the hypothesis that binocular visual space is metric and hyperbolic.—F. Ratliff.
- (See also abstracts 5287, 5477, 6430, 6520, 6527, 6779)
- ### AUDITION
5555. Bordley, John E., & Haskins, Harriet L. **The rôle of the cerebrum in hearing.** *Ann. Otol., etc., St. Louis*, 1955, **64**, 370-382.—The PGSR appears to measure the efficiency of the auditory end organ and the sub-cortical pathways. The standard audiometry measures the hearing mechanism as a whole from the external ear through the auditory cortex. Those individuals "with good hearing by PGSR but poor hearing by subjective audiometry, poor discrimination response, inability to use amplification, suffer fundamentally from damage to the cerebrum, probably the cerebral cortex." The difference between subjective and objective audiometry is suggested as the degree of cerebral sclerosis of the auditory area.—J. C. G. Loring.
5556. Comer, F. A. **Perceptibility of flutter in speech and music.** *J. Soc. Mot. Pict. Engrs.*, 1955, **64**, 117-122.—The results of subjective rankings of various speech and music selections containing various amounts and types of flutter are presented. These rankings are compared to the type of flutter and the results of flutter measurements using peak and root-mean-square (r.m.s.) indications and various flutter-rate weighting networks. The comparisons show that a meter using an r.m.s.-indicating device and a flutter-rate weighting network will provide flutter measurements which are directly related to the obnoxious quality that the flutter imparts to music and to speech.
5557. Corso, John F. **Evaluation of operating conditions on a Békésy-type audiometer.** *Arch. Otolaryng., Chicago*, 1955, **61**, 649-653.—The purpose was to determine the effects of testing time and signal attenuation rate on 3 criterion measures: threshold values at 1,000 cps; variability of response above and below mean threshold value; and threshold reliability of test-retest audiograms. Results show that the "testing time and attenuation rate have no effect on mean threshold value at 1,000 cps; attenuation rate has a significant effect on threshold variability; and attenuation rate has a significant effect on test-retest reliability." It is concluded that the optimal performance is when attenuation rate of 0.5 db/sec. is combined with a total testing time of 5, 10, 20 minutes.—J. C. G. Loring.
5558. Goetzinger, C. P., & Proud, G. O. **Speech audiometry by bone conduction.** *Arch. Otolaryng., Chicago*, 1955, **62**, 632-635.—The purpose of this experiment was "to investigate the feasibility of employing the speech reception threshold by bone conduction as a supplementary measure to the pure tone bone conduction test." It was found that speech reception tests by bone conduction correlate well with

the average pure tone threshold by bone conduction for frequencies 500, 1,000, and 2,000 cps. "The clinical advantages of speech testing by bone conduction include the following: it provides a check on the reliability of pure tone bone conduction, and it is an aid in the prediction of the results of the operative procedures for otosclerosis, where accuracy in the determination of the cochlear involvement is paramount."—J. C. G. Loring.

5559. Griffin, D. R., & Novick, Alvin. (Harvard U., Cambridge, Mass.) **Acoustic orientation of neotropical bats.** *J. exp. Zool.*, 1955, 130, 251-300.—The high frequency sounds emitted by 16 species of bats from Panama were analyzed. All bats studied emitted a 0.4 to 25 msec. pulse. Bats that feed on fruit or blood emit pulses about 1/1000 of the sound energy that is found in bats that feed on insects or fish. Noctelio employs a high energy complex frequency modulated pulse while catching fish and Es advanced the hypothesis that submerged fish may be detected by echolocation.—R. T. Davis.

5560. Haskell, P. T. **Hearing and vibration sense in insects.** *Brit. J. anim. Behav.*, 1956, 4, 121-122.—Abstract.

5561. Lawrence, Lois Carolyn. **Auditory flutter fusion as a measure of central effectiveness.** *Disseration Abstr.*, 1956, 16, 1724-1725.—Abstract.

5562. Lawrence, Merle, & Yantis, Phillip A. **Threshold of overload in normal and pathological ears.** *Arch. Otolaryng.*, Chicago, 1956, 63, 67-77.—"By employing the overload threshold measurement technique in abnormal ears it is shown that pathology of the middle ear, while affecting sensitivity, does not alter the very linear characteristics of the conductive mechanism. On the other hand, pathology of the inner ear produces a marked restriction of the hearing range from threshold to overload. The technique of measuring the threshold of aural overload provides a quantitative measure of audible distortion and the significance of its presence in various inner-ear pathologies is discussed."—J. C. G. Loring.

5563. Lierle, Dean M., & Reger, Scott N. **Further studies of threshold shifts as measured with the Békésy-type audiometer.** *Ann. Otol., etc., St. Louis*, 1954, 63, 772-784.—"The threshold sensitivity of the ear is susceptible to frequent and relatively rapid fluctuations resulting from the ordinary every day noise environment, recovery of the sensitivity following such exposure is correspondingly rapid, with little or no after-effect. However, the shift resulting from low intensity level exposure is exceedingly resistant to increase in magnitude until relatively high intensity level exposures are encountered. A cumulative intensity or constant intensity or series of interrupted exposures permits observations of the slope and extent of the shifts as they develop during the exposure series. This technique permits terminations of the exposures when a given pre-determined magnitude of shift has been produced."—J. C. G. Loring.

5564. Rosen, Jack. **The place of GSR audiometry in work with young children.** *Volta Rev.*, 1956, 58, 387-391.—In the evaluation of children who cannot respond adequately to either standard or play audiometry, an objective measurement of hearing is necessary. Described here is the Galvanic Skin Re-

sponse test, only one in a series of tests used to evaluate hearing. Its relationship to standard pure tone audiometry is considered and the complications of its administration explained. The conditioning procedure, test situation, and interpretation of findings are described. It is not recommended as the method of choice for routine testing; its place is in the hearing clinic handling a heavy case load of preschool children requiring special diagnostic procedures.—(Courtesy of Rehab. Lit.)

5565. Schwartzkopf, Johann. **On the hearing of birds.** *Auk*, 1955, 72, 340-347.—The cochlea of birds increases relatively but decreases absolutely with decreasing body size. The basilar membrane of a parrot is 2.6 mm. in length compared to 31 mm. in man, though both have similar pitch discrimination. "The steadily increasing width of the basilar membrane—a fundamental support of any resonance theory—is not found in the cochlea of birds." Sound analysis in birds must occur in the brain.

5566. Zarcoff, Morton. **A graphic method of determining binaural hearing loss.** *Arch. Otolaryng.*, Chicago, 1955, 61, 596.—The author constructs a chart "in which the vertical represented the percentage loss of the better ear and the horizontal the percentage loss of the worse. The intersection represented the combined percentage loss for both ears."—J. C. G. Loring.

(See also abstracts 5274, 5477, 6430, 6520, 6527, 6779)

RESPONSE PROCESSES

5567. Ammons, C. H., & Ammons, R. B. (U. North Dakota, Grand Forks.) **Motor skills bibliography: XVI. Psychological Abstracts, 1946, Volume 20.** *Percept. Mot. Skills*, 1956, 6, 257-260.—96 references to published experimental studies and books are given. Material is listed alphabetically by author and the number of the abstract is given.—J. Coulson.

5568. Andrew, R. J. **Normal and irrelevant toilet behaviour in *Emberiza* Spp.** *Brit. J. anim. Behav.*, 1956, 4, 85-91.—A description of preening, scratching, feather-settling movements, bathing and drying, bill-wiping, pecking, yawning and stretching of 4 related species of bunting is given. An analysis of provocative stimulus situations discloses toilet-behavior occurring irrelevantly as displacement activities, usually when incompatible behavior tendencies occur at approximately equal strength.—L. I. O'Kelly.

5569. Andrew, R. J. **Some remarks on behaviour in conflict situations, with special reference to *Emberiza* Spp.** *Brit. J. Anim. Behav.*, 1956, 4, 41-45.—After defining conflict in terms of incompatibility between behavior tendencies that are simultaneously tending to occur, examples are given from observations of British buntings. It is noted that "two simultaneous tendencies can [sometimes] both be expressed in a single behaviour pattern," and it is suggested that this be called "compromise behaviour." Displacement activities may also be seen in conflict situations.—L. I. O'Kelly.

5570. Annett, John, & Kay, Harry. (U. Oxford, Eng.) **'Skilled performance.'** *Occup. Psychol.*, 1956, 30, 112-117.—The skilled performance is considered as a series of events, with each event or cue

providing information for the operator. The amount of information carried by each event will vary according to the dependent probabilities. The unskilled worker may increase uncertainty by his own response variable, but the skilled worker's responses are often invariant, receiving maximum information from minimum cues.—G. S. Speer.

5571. Bauer, Frank J. (Roscoe B. Jackson Memor. Lab., Bar Harbor, Me.) **Genetic and experiential factors affecting social reactions in male mice.** *J. comp. physiol. Psychol.*, 1956, 49, 359-364.—Male mice of two strains, sub-groups of which were raised in isolation or with female litter-mates, were tested in a situation designed to evoke aggressive behavior. The two strains differed in aggression scores, isolation not appearing as a significant variable in aggression. Non-isolates did nose the genital area of stimulus mice more frequently. Attacks were made significantly more frequently on stimulus animals of unlike strain.—L. I. O'Kelly.

5572. Bauer, R. O., & Pearson, R. G. (Randolph A.F.B., Tex.) **The effects of morphine-nalorphine mixtures on psychomotor performance.** *J. Pharmacol.*, 1956, 117, 258-264.—Following a 50-minute training period on a complex, perceptual-motor task, 96 volunteer Air Force basic trainees were equally and randomly assigned to 12 combinations of 6 pharmacological and 2 motivational feedback treatments, then continued at the task proper for 4 hours. Performance of the group given morphine intravenously was no poorer than that of a group given saline, while those groups given mixtures of morphine with a morphine antagonist, nalorphine, or nalorphine alone exhibited a decrement in performance much greater than either morphine or saline groups. Performance of the group receiving motivational feedback was superior to that of the group receiving no feedback.—B. Weiss.

5573. Beach, Frank A. **The descent of instinct.** *Americana*, 1956, 2, 48-59.—Translated into Japanese from *Psychol. Rev.*, 1955, 62, 401-410 (see 30: 5619).

5574. Beach, Frank A., & Jordan, Lisbeth. **Sexual exhaustion and recovery in the male rat.** *Quart. J. exp. Psychol.*, 1956, 8, 121-133.—"Twelve male rats were left with receptive females and allowed to copulate and ejaculate until they reached a criterion of 'sexual exhaustion.' . . . The time to recover from the effects of an ejaculation increases progressively as exhaustion is approached. . . . As measured by ejaculation-frequency, the curve of sexual recovery is negatively accelerated and probably reaches asymptote after 7 to 10 days of rest. Various other measures in addition to ejaculation-frequency support this conclusion. Males allowed to ejaculate once each day or every other day are somewhat less responsive than fully rested animals, but do not show any progressive loss in sexual excitability or capacity."—M. J. Wayner, Jr.

5575. Beach, Frank A., Zitrin, Arthur, & Jaynes, Julian. (Yale U., New Haven, Conn.) **Neural mediation of mating in male cats: I. Effects of unilateral and bilateral removal of the neocortex.** *J. comp. physiol. Psychol.*, 1956, 49, 321-327.—After establishing stable indices of mating performance, male cats were subjected to unilateral decortication. Following additional testing, two cats were made bi-

laterally decorticate. Unilateral decortication increased mating latency, decreased frequency of mounting and intromission and increased the frequency of gripping not followed by intromission, but there appeared no decrease in responsiveness to sexual stimuli. Bilateral decortication abolished sexual responsiveness. Androgen administration had no stimulating effect on the bilaterally decorticate animals. 17 references.—L. I. O'Kelly.

5576. Beach, Frank A., Zitrin, A., & Jaynes, Julian. (Yale U., New Haven, Conn.) **Neural mediation of mating in male cats. II. Contributions of the frontal cortex.** *J. exp. Zool.*, 1955, 130, 381-401.—The mating responses of 6 adult male cats were studied. Two Ss were intact when the experiments began, 2 had undergone removal of most of their occipital cortex and 2 had had unilateral excision of the neocortex. The latter 4 Ss had received tests of sexual vigor prior to their initial surgery. All 6 Ss then received bilateral removal of the frontal cortex. Changes in mating patterns following the frontal lesions were related to motor impairment and possible sensory deficiencies.—R. T. Davis.

5577. Clay, Hilary M. **An age difficulty in separating spatially contiguous data.** *J. Geront.*, 1956, 11, 318-322.—Task complexity was varied in an attempt to determine if there was an age difference in susceptibility to confusion in picking out relevant items from a group of similar items placed in close proximity. Results were obtained on 66 subjects ranging in age from the twenties to the seventies. In the more complex situation, accuracy declined with age and task time increased. "Some of the older subjects seemed to have difficulty in separating relevant from irrelevant, but similar, items in close proximity."—J. E. Birren.

5578. Cleveland, L. R., & Nutting, W. L. (Harvard U., Cambridge, Mass.) **Suppression of sexual cycles and death of the protozoa of *Cryptocercus* resulting from change of hosts during molting period.** *J. exp. Zool.*, 1955, 130, 485-513.—The intestinal flagellates of the wood roach change from asexual to sexual methods of reproduction when their host molts. By transferring parasites from one host to another and covarying the stage of development in host and parasite, Es found that the roach rather than the protozoa possesses the factors that start and maintain the sex cycle of the protozoa.—R. T. Davis.

5579. Costa, Erminio. (Chicago Med. Sch., Ill.) **The effects of hallucinogenic and tranquilizing drugs on the serotonin evoked uterine contractions.** *Psychiat. Res. Rep.*, 1956, No. 4, 11-23.—The effects of selected drugs on the uterine contractions of spayed rats brought into oestrus by injections of ovarian hormone were studied. Azacyclonol, chlorpromazine, and reserpine antagonized the serotonin-induced contractions. Mescaline was found to "cause a facilitation of serotonin activity, and in higher amounts caused uterine contraction. The response was facilitated by LSD in low concentrations and antagonized by LSD in high concentrations." It was concluded that "a correlation seems to exist between the behavioral effects and those exerted upon the serotonin-evoked contraction of the rat's uterus. The hallucinogenic drugs increased the contraction, while the tranquilizing ones inhibited it." 34 references.—L. A. Pennington.

5580. Crook, John H. Nest construction in the weaver birds with special reference to the genus *Quelea*. *Brit. J. anim. Behav.*, 1956, 4, 76-77.—Abstract.

5581. Denbigh, K. G. Non-localisation as a model for telepathy. *J. Soc. psych. Res., Lond.*, 1956, 38, 237-244.—The most difficult stage of any major theory is the invention of primary ideas themselves, and psychical research is in just such a stage at present. There is a parallel between recent Physics history and Extra-Sensory Perception, wherein the former no longer regards electrons and protons as having unique location in time and space, and the latter, like Descartes' philosophy, localizes the "I," "here," and "now," but in recognizing mental status existence, words become much less meaningful. Time no longer has a pointlike quality at all levels of consciousness, and is not sharply localized with physical time. In telepathy between two persons, temporal displacement can be explained as non-localized, but also as a continuous function.—O. I. Jacobsen.

5582. Eisman, Eugene. (U. California, Riverside.) An investigation of the parameters defining drive (D). *J. exp. Psychol.*, 1956, 52, 85-89.—"It was hypothesized that D is some function of two parameters, h (related to hours of deprivation at the time of measurement) and h_t (related to total hours of deprivation during a unit of time). It was further assumed that h is related to stomach distension. . . . The implications of the parameter h_t and the necessity of specifying both h_t and the usual parameter h were shown by reference to the literature."—J. Arbit.

5583. Fields, Paul E., Adkins, Ronald J., & Finger, Gary L. (U. Washington, Seattle.) The swimming ability of immature silver salmon (*Oncorhynchus kisutch*) measured in an experimental flume. *Univ. Wash. Sch. Fish. Tech. Rep.*, 1954, No. 9, 1-22.—The swimming ability of 8 groups of 100 immature silver salmon was measured in an experimental flume by 2 methods: (1) the time before the fish became impinged upon a stationary vertical screen, (2) the time before displacement over an inclined plane at the end of the flume. The first method is the better measure of severe fatigue under strong motivation. The second method may be as much a measure of motivation as of physical fatigue. When a 20° angled light barrier with 90 ft. cdl. of illumination was introduced in one-half of the flume, 80% of the fish were able to avoid this side and were impinged on the retaining screen or were displaced over the falls in the dark.—P. E. Fields.

5584. Fields, P. E., Finger, G. L., Adkins, R. J., Carney, R. E., & Pyke, R. (U. Washington, Seattle.) A factorial study of the response of steelhead trout, chinook and silver salmon fingerlings to chain barriers in moving water. *Univ. Wash. Sch. Fish. Tech. Rep.*, 1955, No. 13, 1-7.—A total of 48 groups each containing 50 yearling steelhead trout or chinook or silver salmon were tested for guidance with a chain barrier in a factorial study. The only difference which was significant at the .001 level was that between species, with more steelhead than chinook, and more chinook than silvers being found behind the chain barrier (guidance failures). The angle of the barrier, the density of the chains, and the velocity of the water were significant only at the .05 level.—P. E. Fields.

5585. Fields, P. E., Finger, G. L., & Verhoeven, L. A. (U. Washington, Seattle.) The use of a chain barrier to guide young salmon. *Univ. Wash. Sch. Fish. Tech. Rep.*, 1954, No. 1, 1-11.—A total of 568 silver, chinook and sockeye salmon and steelhead trout (*Oncorhynchus kisutch*, *O. tshawytscha*, *O. nerka*, and *Salmo gairdnerii*) from 3 age groups were tested in a 2 choice discrimination apparatus during the daytime and at night to determine the response to a chain barrier hung in still water. When the strands of safety chain were not more than 2.5 cm. apart, 66% of the fish were deflected in the daytime and 56% at night, while the channel with the slightly higher level of illumination deflected 89%. Light was significantly more effective than chains.—P. E. Fields.

5586. Fleishman, E. A. (Yale U., New Haven, Conn.) Comparison of two types of verbal guidance on performance of a perceptual-motor task. *Percept. Mot. Skills*, 1956, 6, 272.—Within the limits of the small number of trials employed and with the kind of perceptual-motor task used, it is concluded that preliminary verbal guidance giving either a perceptual or motor "set" has negligible influence on performance or rate of improvement on the total task.—C. H. Ammons.

5587. Fredericson, Emil; Gurney, Nancy, & Dubois, Edna. The relationship between environmental temperature and behavior in neonatal puppies. *J. comp. physiol. Psychol.*, 1956, 49, 278-280.—Behavior of young puppies when placed in contact with cold and warm surfaces was investigated. Warm surfaces elicited relaxation and sleep; cold surfaces resulted in attempts at avoidance and vocalization. "The results suggest that environmental temperature gradients represent a significant class of variables in determining neonatal responses to the environment."—L. I. O'Kelly.

5588. Free, J. B. (Rothamsted Exper. Sta., Eng.) A study of the stimuli which release the food begging and offering responses of worker honeybees. *Brit. J. anim. Behav.*, 1956, 4, 94-101.—Experimental observations show that workers orient towards the head of fellows from whom they receive food, the excised head of a worker being sufficient to release the 'begging' response. The scent of the head region is an important variable, but color and shape are of little importance. Bees with antennae removed would offer food but could not beg. "Both begging and offering are innate reactions and improve in precision with age, independently of conditioning."—L. I. O'Kelly.

5589. Fregly, M. J. Relationship between ambient temperature and the spontaneous running activity of normal and hypertensive rats. *Amer. J. Physiol.*, 1956, 187, 297-301.—When illumination was held constant, lowering ambient temperature increased spontaneous running activity of both normal and hypertensive rats in a sigmoid fashion. The spontaneous activities of normal and hypertensive rats were similar in the range of temperatures from 25 to 30°C. At all temperatures lower than 25°C, the activity of normal rats was significantly higher than that of hypertensive rats. This indicates that hypertension limits the increased running activity normally seen in low temperatures.—J. P. Zubek.

5590. Gertz, Boris. The effects of handling at various age levels on emotionality and exploratory

behavior of adult rats. *Dissertation Abstr.*, 1956, 16, 1502-1503.—Abstract.

5591. Gilbert, Thomas F., & James, W. T. (U. Georgia, Athens.) The dependency of cyclical feeding behavior on internal and external cues. *J. comp. physiol. Psychol.*, 1956, 49, 342-344.—"The food intake of ten hooded rats was measured every 6 hr. in several 24-hr. periods (a) with the light on 12 hr. and off 12 hr., (b) with the light on 24 hr., (c) with free access to water in combination with the light conditions, and (d) with 24-hr. water deprivation in combination with light conditions. It was found that cyclical eating behavior exists, to some extent, independently of normal physiological rhythm, and, to some extent, independently of environmental cues. Interference with both internal rhythms and environmental cues, however, creates arrhythmicity."—L. I. O'Kelly.

5592. Gill, J. C., & Thomson, W. (Rowett Res. Inst., Bucksburn, Aberdeenshire, Scotland.) Observations on the behaviour of suckling pigs. *Brit. J. Anim. Behav.*, 1956, 4, 46-51.—Based on observations of the suckling behavior of 8 litters, it was noted that there is a positive correlation between total time spent on massage at each nursing and total milk yield. The position of the sow at nursing time influences yield, since those sows that favor a standing position cannot be massaged as effectively as those in a reclining position. There is a high positive correlation between milk consumption and growth.—L. I. O'Kelly.

5593. Griffiths, William J., Jr. (U. Mississippi, University.) Diet selections of rats run to exhaustion on a treadmill. *J. comp. physiol. Psychol.*, 1956, 49, 334-335.—Rats subjected to prolonged treadmill running and allowed self-selection diet among 16 substances showed significant increases in their 'exhaustion' intake of sodium hydrogen phosphate and of calcium pantothenate. It is suggested that, "in view of the known relationships of the latter substance (calcium pantothenate) with the hormones of the adrenal cortex, it might be hypothesized that our findings indicate the presence of a behavioral homeostatic mechanism operating to compensate for the unbalances produced by treadmill-running."—L. I. O'Kelly.

5594. Hall, John F. (Pennsylvania State U., State University.) The relationship between external stimulation, food deprivation, and activity. *J. comp. physiol. Psychol.*, 1956, 49, 339-341.—After an adaptation period to activity-wheel living in a dark environment, activity of 12 male albino rats was measured for half-hour periods, first under adaptation conditions, and then under conditions of marked increase in environmental visual and auditory stimulation. Following 9 days of such measurement half the animals were tested under food deprivation conditions. Increased environmental stimulation and food deprivation resulted in marked increases in activity.—L. I. O'Kelly.

5595. Hinde, R. A. The behaviour of certain *Cardueline* F₁ inter-species hybrids. *Behaviour*, 1956, 9, 202-213.—Various hybrids between finches and the domestic canary were studied. Behavior patterns common to both parent species were found unaltered in the hybrids. When patterns differ in

form or frequency in the parents, they are found in an intermediate degree in the offspring. Patterns found only in one parent are found to an intermediate degree in the offspring. 32-item bibliography. German summary.—L. I. O'Kelly.

5596. Hinde, R. A., Thorpe, W. H., & Vince, M. A. The following responses of young coots and moorhens. *Behaviour*, 1956, 9, 214-242.—In hand-raised birds, following was found to be elicitable by a variety of objects, differing in shape, size and pattern, but having in common being in motion. Birds could be trained to follow different models on successive trials, and would generalize readily from one model to another. Frequency of following responses was greatest if testing began the first day after hatching. "There is no evidence that 'imprinting' is fundamentally different from other types of learning." 18 references. German summary.—L. I. O'Kelly.

5597. Holten, C. H., & Sonne, Else. (Medinalco, Ltd., Copenhagen.) Action of a series of benactyzine-derivatives and other compounds on stress-induced behavior in the rat. *Acta pharm. tox., Kbh.*, 1955, 11, 148-155.—Various compounds were compared with benactyzine for their effect in reducing tenseness and emotionality. A benactyzine-like effect on behavior was observed for various benactyzine derivatives, and for scopolamine "... but atropine, morphine, morphine substitutes, and reserpine [had] slight effect. Diphenhydramine and related compounds, barbiturates, ethyl alcohol, chlorpromazine, and quaternary ammonium compounds [were] ineffective. All the effective compounds [were] anticholinergic."—G. A. Heise.

5598. Jacobsen, Erik, & Skaarup, Y. (Medinalco, Ltd., Copenhagen.) Experimental induction of conflict behavior in cats: the effect of some anticholinergic compounds. *Acta pharm. tox., Kbh.*, 1955, 11, 125-134.—Various compounds were tested for their effect in "normalizing" behavior of cats in a conflict situation, as measured by duration and number of feeding cycles and by number and intensity of displacement activities. "A clear cut normalizing effect was seen after administration of a series of benzoic acid aminoester derivatives. The best results were obtained with the N-diethylaminoethyl derivative [benactyzine]. Some effect was also seen after alcohol. Scopolamine and chlorpromazine showed no effect by the technique employed."—G. A. Heise.

5599. Keller, Doris L., & Umbreit, Wayne W. (Merck Inst. Therapeutic Res., Rahway, N. J.) Chemically altered "permanent" behavior patterns in fish and their cure by reserpine. *Science*, 1956, 124, 407.—Abnormal behavior consisting of a characteristic vibrating behavior and rapid swimming until the wall of the container is reached at which point the fish continue to swim "apparently unaware that they were not making any progress" is induced with small quantities of LSD. Behavior patterns of fish whose abnormalities lasted for many weeks returned to normal and remained normal subsequently if treated with reserpine.—S. J. Lachman.

5600. Lowe (McConnell), R. H. (East African Fisheries Res. Org., Jinja, Uganda.) The breeding behaviour of *Tilapia* species (Pisces: cichlidae)

in natural waters: observations on *T. karoma* Poll and *T. variabilis* Boulenger. *Behaviour*, 1956, 9, 140-163.—Field studies of Cichlid fishes in their natural habitat are reported and differences between these observations and aquaria studies are noted. In some species surface territories seen in aquaria were not present in natural surroundings. Frequency of broods was less under natural conditions, largely because the females could segregate from the males after spawning. 29-item bibliography.—L. I. O'Kelly.

5601. Maïorov, F. P., & Firsov, L. A. O dinamicheskoï stereotipii u chelovekoobraznykh obez'ian (shimpanze). (On the dynamic stereotype in the humanoid monkeys (chimpanzees).) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6(1), 44-52.—Experimental data allow the following conclusions to be drawn: (1) the "cortical motor dynamic stereotype" plays an essential role in the complex behavior of the chimpanzee; (2) a stereotype that has been formed exerts an inhibitory influence on instinctive motor reactions; (3) in the joint activity of the kinesthetic and visual analyzers the former is functionally the more preponderant.—L. D. London.

5602. Manning, Aubrey. (U. Oxford, Eng.) The effect of honey-guides. *Behaviour*, 1956, 9, 114-139.—Honey-guides are markings on the petals of flowers arranged in such a manner as to lead from the periphery to the nectaries. Using bumble-bees and models, it was determined that the bee's initial reaction is to the edge of the flower, where it contrasts with a background, and not to the "honey-guides" as such. The appearance of following the honey-guides is only because the guides lead convergingly to the center of the flower. 25-item bibliography.—L. I. O'Kelly.

5603. Manning, Aubrey. (U. Oxford, Eng.) Some aspects of the foraging behaviour of bumble-bees. *Behaviour*, 1956, 9, 164-201.—Bumble-bees may orient to the general form of plants or the plant's location if the flowers are small. If the flowers are large and conspicuous, the bees orient to the color of the flower. "These results show that the foraging behaviour of bumble-bees is most flexible and that they can adapt themselves to suit very different features of the plants they visit." German summary.—L. I. O'Kelly.

5604. Marler, P. (U. Cambridge, Eng.) The voice of the chaffinch and its function as a language. *Ibis*, 1956, 98, 231-261.—"The first part of this paper describes the physical structure of the calls, by analysis of tape-recordings, and discusses the contexts in which they occur." The calls are labeled flight, social, injury, aggressive, escape (3), sub-song, song, courtship (3), and begging (nestling and fledgling). "The second part deals with their communicatory function . . . the recipient responds as though certain items of information have been received." One of the courtship calls, for example, communicates to the listener that the caller is a female chaffinch at a particular place, who is ready to copulate and is liable to attack other chaffinches. 32 references.—N. M. Ginsburg.

5605. Mitchell, W. G., & Hitchcock, F. A. Influence of decreased ambient oxygen on susceptibility of rats to audiogenic seizures. *Amer. J. Physiol.*, 1956, 187, 571-572.—Male rats were tested for audiogenic seizure susceptibility, at various levels

of decreased ambient oxygen. At 15.9% and 12.3% oxygen, the number of seizures occurring were approximately the same as the controls. Enhancement of seizure susceptibility occurred at 14.5% ambient oxygen, indicating an excitatory effect. Oxygen levels of 9.6% and below resulted in inhibition of seizures. The results indicate a biphasic effect of oxygen lack on audiogenic seizure susceptibility.—J. P. Zubeck.

5606. Morris, Desmond. (U. Oxford, Eng.) The feather postures of birds and the problem of the origin of social signs. *Behaviour*, 1956, 9, 75-113.—The original thermoregulatory function of feather arrangement is described, and four major types of arrangement are differentiated: (1) *sleeked*, with feathers held close to the body, insulating value reduced, and bird in action; (2) *relaxed*, the usual state of inactive birds not exposed to temperature stress; (3) *fluffed*, giving the body a rounded appearance, this is maximally insulating; (4) *ruffled*, with feathers extremely erected, destroys the insulating effect and is characteristic of birds in very hot environments. Signalling functions of feather arrangement stem from the pilomotor activities consequent to thwarting. The various types of display and communication functions of feather arrangement are discussed and illustrated. 52-item bibliography.—L. I. O'Kelly.

5607. Pawloski, Albert A., & Scott, J. P. (Roscoe B. Jackson Memor. Lab., Bar Harbor, Me.) Hereditary differences in the development of dominance in litters of puppies. *J. comp. physiol. Psychol.*, 1956, 49, 353-358.—Dominance tests within litters of Basenji, beagle, cocker spaniel and fox terrier strains were carried out at intervals over a year's time, each animal being tested with each littermate. Results indicate that dominance relationships are a part of the normal development of social organization within litters of puppies. Marked differences in the development of dominance hierarchies were noted through the year in the four strains. It is concluded that the observed differences between strains are genetically determined. 20 references.—L. I. O'Kelly.

5608. Provins, K. A. (U. Oxford, Eng.) "Handedness" and skill. *Quart. J. exp. Psychol.*, 1956, 8, 79-95.—"The variability of handedness with different tasks is discussed. Experiments are described which show under what conditions handedness becomes evident. Tasks involving 3 different levels of complexity were used. . . . The results suggest that differences in performance between the 2 sides only occur where 'timing' or the serial organization of muscle activity is required and that such differences may be due to training." Results from additional experiments confirm ". . . that differences in performance between the 2 sides of these tasks can be adequately explained in terms of usage or training" and that "timing" is important in the learning of any movement when serial muscle contractions are involved.—M. J. Wayner, Jr.

5609. Roberts, Shepherd K. de F. (Princeton U., N. J.) "Clock" controlled activity rhythms in the fruit fly. *Science*, 1956, 124, 172.—A question of prime importance is whether the active period is determined by strictly exogenous factors such as light intensity, relative humidity, or temperature, or whether an internal biological timing device is in-

involved." A mechanism for recording locomotor activity under wide ranges of light intensity including total darkness is described. The data "... strongly suggest that a biological 'clock' is operative in determining the active periods for the flies." A "rhythm of activity persists under constant conditions of illumination" and "during ... days of alternating light and dark."—S. J. Lachman.

5610. Ross, Sherman; Denenberg, Victor H., Sawin, Paul B., & Meyer, Paul. (R. B. Jackson Mem. Lab., Bar Harbor, Me.) **Changes in nest building behaviour in multiparous rabbits.** *Brit. J. Anim. Behav.*, 1956, 4, 69-74.—The hypothesis that quality of nest will improve with successive litters in the rabbit was tested through four litters with a group of 84 rabbits of 3 races and 2 sub-lines. Results indicate the hypothesis to be substantiated and to show also significant race differences. Improvement tended to be linear. Interpretations in terms of learning and endocrine changes are discussed.—L. I. O'Kelly.

5611. Russell, R. W. **Some effects of severe hypothermia in behaviour.** *Brit. J. Anim. Behav.*, 1956, 4, 75.—Abstract.

5612. Sawrey, William L., & Weisz, John D. **An experimental method of producing gastric ulcers.** *J. comp. physiol. Psychol.*, 1956, 49, 269-270.—Gastric ulcers were developed in rats that were maintained in cages where access to food or water was conditional upon receiving strong electric shock. Animals so maintained for 30 day periods developed ulcers and hemorrhagic areas throughout the stomach. Control animals maintained similarly but without the shock conflict failed to show ulcers.—L. I. O'Kelly.

5613. Schwartz, Marvin. (Yale U., New Haven, Conn.) **Instrumental and consummatory measures of sexual capacity in the male rat.** *J. comp. physiol. Psychol.*, 1956, 49, 328-333.—Male rats were trained to secure a sexually receptive female by pressing a lever. Two problems were investigated: (a) "relationship between length of time allowed for recovery from sexual exhaustion and amount of sexual behavior necessary to produce a second exhaustion," and (b) relationship between instrumental responses leading to sexual opportunities and subsequent sexual performance. Recovery varied directly with time following previous sexual exhaustion. Bar pressing rate was not a sensitive indicator of motivational strength after differing periods of recovery, but does differentiate reliably between sexual performances of different animals. Bar pressing rate is higher when ejaculation is imminent, but varies inversely with number of copulations preceding ejaculation.—L. I. O'Kelly.

5614. Scriven, Michael. **New experimental designs for Psi research.** *J. Soc. psych. Res., Lond.*, 1956, 38, 231-237.—The author suggests: (1) Asking subjects to name cards using a random call-order. (2) Does beliefs of card order effect calling by the subject? (3) Do subjects tend to confuse two or more symbols in calling? (4) How do sensitive card callers behave when acting as experimental supervisors for each other? (5) Can the ESP subject be trained? (6) A series using repeated targets. (7) The influence of health on results. (8) Trying to induce a subject to score below the level of chance. (9) A universally adopted signalling device. (10)

Testing hypnotic recall in experiments. (11) Inducing hypnotic recall in the sitters. (12) Testing new sensitivities with clock-cards. (13) Statistical investigation of validity, and (14) Normal stimulus-response pattern allowed to ossify as little as possible.—O. I. Jacobsen.

5615. Stamm, John S. (California Inst. Technol., Pasadena.) **Genetics of hoarding. II. Hoarding behavior of hybrid and backcrossed strains of rats.** *J. comp. physiol. Psychol.*, 1956, 49, 349-352.—Subjects from a high-hoarding strain were bred with subjects from a low-hoarding strain. F1 offspring showed hoarding test scores similar to their high-hoarding parents. F1 animals were backcrossed to the low-hoarding parent strain. Offspring of this cross showed a wide distribution of hoarding scores, the mean being between that of the two parental strains and the distribution showing bimodality. "The results of this investigation support the hypothesis that hoarding behavior is influenced by heredity." (See 29: 2082.)—L. I. O'Kelly.

5616. Stern, John A. **The permanence of effect of a series of electroconvulsive seizures on open-field behavior.** *J. comp. physiol. Psychol.*, 1956, 49, 411-415.—"A series of 15 ECS administered at the rate of one per day produced significant changes in open-field behavior of male albino rats as measured 30, 65 and 100 days after initiation of the series of ECS. These changes consisted of a decrease in activity and an 'increase' in emotional behavior. The changes appeared at the first post-ECS testing and persisted throughout the experiment." Activity-wheel running showed no significant differences between ECS and controls, a finding at variance with earlier results and possibly related to management of deprivation schedules in the earlier experiment.—L. I. O'Kelly.

5617. Stone, C. P., & Obias, M. D. (Stanford U., Calif.) **Effects of hypophysectomy on behavior in rats. IV. Activity level and work capacity.** *J. comp. physiol. Psychol.*, 1956, 49, 404-406.—Using as a work task a sand-digging apparatus, hypophysectomized and normal rats were studied, the measure of work being the time in minutes to dig various amounts of sand. Results indicate a linear relationship between amount and time for both groups for work loads up to 4 quarts of sand. For larger amounts the hypophysectomized rats showed an abrupt increase in work time, although the controls continued at a linear rate.—L. I. O'Kelly.

5618. Stone, C. P., & Obias, M. D. (Stanford U., Calif.) **Effects of hypophysectomy on behavior in rats. V. Wheel-turning activity and performance on the Maier reasoning apparatus.** *J. comp. physiol. Psychol.*, 1956, 49, 407-410.—Hypophysectomized animals showed more activity and more increase in activity over trials than did controls, the interpretation being uncertain, however, because of the low activity level of the control animals. There were no significant differences in performance in the Maier reasoning apparatus.—L. I. O'Kelly.

5619. Stride, George O. (U. Gold Coast, Achimota.) **On the courtship behaviour of *Hypolimna misippus* L., (Lepidoptera, Nymphalidae), with notes on the mimetic association with *Danaus chrysippus* L., (Lepidoptera, Danaidae).** *Brit. J. anim. Behav.*, 1956, 4, 52-68.—Observations of the

mating behavior of these butterflies were carried out with test models prepared from the wings of freshly killed insects, presented to free-living males. While early stages of courtship appear to be under visual control, later stages were under "behavioural and chemosensory" stimulus control. Stimuli from the wings of a male test insect were strongly inhibitory to courtship reactions, as were white or light-colored test insects. It is of interest to note that the female of *D. chrysippus* closely resembles the female of *H. misippus* except for the light-colored hind-wings of the former.—L. I. O'Kelly.

5620. Thompson, Richard F., Voss, James F., & Brogden, W. J. (U. Wisconsin, Madison.) The effect of target-velocity upon the trigonometric relationship of precision and angle of linear pursuit-movements. *Amer. J. Psychol.*, 1956, 69, 258-263.—"Performance of linear pursuit-movement with the right arm was studied as a function of angle of movement from the body and target-velocity." Eight angles and 5 velocities were tested by 2 Es on 40 Ss each. "Analysis of variance of the standard error-scores revealed the trigonometric relationship of precision and angle of linear pursuit-movements as found in previous studies in this series."—R. H. Waters.

5621. Thornton, I. W. B. Notes on the biology of *Leiurus quinquestriatus* (H. & E. 1829) (Scorpiones, Buthidae). *Brit. J. anim. Behav.*, 1956, 4, 92-93.—Courtship behavior, copulation, gestation and burrowing activities of scorpions are described. The male is usually, but not always, eaten by the female after copulation. Gestation observed was 155 days. The number of offspring is variable, three females raised in the laboratory producing 82, 42, and 77 respectively.—L. I. O'Kelly.

5622. Vince, Margaret A. (Psychol. Lab., Cambridge, Eng.) 'String pulling' in birds. I. Individual differences in wild adult great tits. *Brit. J. anim. Behav.*, 1956, 4, 111-116.—Apparatus is described and preliminary experiments presented. Birds were trained to secure seeds by pulling in various lengths of string, to which the seeds were attached. Only one out of 12 great tits learned to pull a 4-inch string.—L. I. O'Kelly.

5623. Walaszek, E. J., & Abood, L. G. (Coll. Med., U. Ill., Chicago.) Effect of tranquilizing drugs on fighting response of Siamese fighting fish. *Science*, 1956, 124, 440-441.—48 sexually mature male Siamese fighting fish (*Betta splendens*) were used. A table of effects of various drugs on *Betta splendens*, including a list of drugs and their classes, number of fish tested, concentration of the drug, onset of action in minutes, nature of the general action, whether or not the fighting response was exhibited, and the type of behavior displayed when confronted with normal fighting fish, is presented.—S. J. Lachman.

5624. Weidman, U. Some experiments on the following and the flocking reaction of mallard ducklings. *Brit. J. anim. Behav.*, 1956, 4, 78-79.—Abstract.

5625. Welker, W. I. (Verkes Lab. Primate Biol., Orange Park, Fla.) Effects of age and experience on play and exploration of young chimpanzees. *J. comp. physiol. Psychol.*, 1956, 49, 223-226.—Older chimpanzees show greater initial contact with novel

objects and reach criteria of adaptation more rapidly. Young animals initially react to strange objects only by eye and head orientation. The optimal period of play and exploration appears to be at about 4 years of age.—L. I. O'Kelly.

5626. Wheeler, Margaret R. Background selection in tadpoles of *Xenopus laevis*. *Brit. J. anim. Behav.*, 1956, 4, 77.—Abstract.

5627. Willingham, Warren W. (U. Tennessee, Knoxville.) The organization of emotional behavior in mice. *J. comp. physiol. Psychol.*, 1956, 49, 345-348.—CFW mice were observed in open field, pipe, cell, home cage, with air jet and on removal from home cage. 20 measures of behavior were taken. Factor analysis resulted in the isolation of six factors, interpreted as: "elimination," "freezing," "grooming," "reactivity to E," "reactivity to light," and "emotional maturity." "It was concluded that it is an oversimplification to speak of emotional versus nonemotional mice" because of the wide differences in types of emotional behavior expressed.—L. I. O'Kelly.

5628. Wood-Gush, D. G. M., & Osborne, R. (Poultry Res. Cent., West Mains Rd., Edinburgh, Scotland.) A study of differences in the sex drive of cockerels. *Brit. J. anim. Behav.*, 1956, 4, 102-110.—Mating frequencies of 30 cockerels from 6 sire families were studied under uniform conditions. Mating frequency varied significantly as a function of sire family. No relationship emerged between mating frequency and semen volume, density or sperm morphology. A significant negative correlation between comb index (height/width) and mating frequency was attributed, in the absence of genetic variability on comb index, to phenotypical variation. 16-item bibliography.—L. I. O'Kelly.

5629. Wood-Gush, D. G. M., & Osborne, R. A study of libido differences in cockerels. *Brit. J. anim. Behav.*, 1956, 4, 78.—Abstract.

5630. Young, Paul Thomas, & Falk, John L. (U. Illinois, Urbana.) The acceptability of tap water and distilled water to nonthirsty rats. *J. comp. physiol. Psychol.*, 1956, 49, 336-338.—Female albino rats under non-thirsty conditions showed a significant preference for tap water over distilled water (5 of 12 Ss). Under a 20-hr. water deprivation no animal showed a preference for either fluid.—L. I. O'Kelly.

COMPLEX PROCESSES AND ORGANIZATIONS

5631. American Eugenics Society, Committee on Research on Intelligence and Personality. Research on intelligence and personality. Report by . . . *Eugen. Quart.*, 1956, 3, 75-81.—The need for a broader conceptual framework in research on the genetic aspects of intelligence and personality is recognized by the American Eugenics Society in the existence of a special committee made up of psychologists, anthropologists, populationists and geneticists who offer brief resumés of information and suggestions as to how future research could or should proceed.—G. C. Schwesinger.

5632. Anderson, Norman H., Grant, David A., & Nystrom, Charles O. (U. Wisconsin, Madison.) The influence of the spatial positioning of stimu-

lus and response components on performance of a repetitive key-pressing task. *J. appl. Psychol.*, 1956, 40, 137-141.—Operator efficiency in a key-pressing task was studied as a function of the positioning of the stimulus panel and response keyboard. Self- and automatic-pacing modes of presentation were used with the nine panel-keyboard combinations. Response time, error index, and latency (for automatic pacing only) measures were collected. No significant error differences were observed, but for each time measure the different treatments differed significantly. Location of the response keyboard was generally more important than location of the stimulus panel.—P. Ash.

5633. Brady, Joseph V. (Walter Reed Army Med. Center, Wash., D. C.) **Assessment of drug effects on emotional behavior.** *Science*, 1956, 123, 1033-1034.—After response rates were stabilized on a schedule involving reinforcement at intervals, "a conditioned emotional response of the 'fear' or 'anxiety' type was superimposed upon the lever pressing behavior" which consisted of depression of lever pressing, crouching, defecation, and immobility, upon presentation of a clicking noise that had been previously paired with a painful electric shock to the feet. Cumulative-response curves showing the effect of amphetamine and reserpine on lever pressing and on the conditioned emotional responses are presented and discussed.—S. J. Lachman.

5634. Brady, Joseph V. (Walter Reed Army Inst. Res., Washington, D. C.) **Emotional behavior and the nervous system.** *Trans. N. Y. Acad. Sci.*, 1956, 18, 601-612.—Several research studies of emotional behavior are reported. The studies "share a common emphasis upon the detailed experimental analysis of a somewhat restricted class of behavioral events and the exploration of their relationships to specific aspects of nervous-system structure and function." The author suggests that "a variety of behavioral and physiological contingencies contribute in most subtle but significant ways to both the topography and dynamic functional properties of such affective phenomena." 38 references.—P. Swartz.

5635. Carmichael, Leonard. **The making of modern mind.** Houston: Elsevier Press, 1956. viii, 88 p. \$2.00.—The 2 chapters deal respectively with the emergence of mind among the infra-animals and in the growing individual. Mind is defined as a collective noun which includes all mental processes such as sensation, perception, learning, motivation, reasoning, intelligence, etc. Such mental processes are traced from the amoeba to man, the continuity and discontinuity noted, the elements of the human mind are not wholly new, but in its totality the mind is "novel, unique, . . . awe-inspiring." The second lecture traces "the growth of mental life from the first twitch of the fetus to the variety of forms and patterns which it shows in the normal, achieving, adult, modern, civilized man or woman."—C. K. Bishop.

5636. Chin, Arnold H. **The effects of expectation on attractiveness of goal objects and on the feelings of subjects upon attainment or non-attainment of a goal object.** *Dissertation Abstr.*, 1956, 16, 1488.—Abstract.

5637. Davidson, William Z., Andrews, T. G., & Ross, Sherman. (U. Maryland, College Park.) **Effects of stress and anxiety on continuous high-**

speed color naming. *J. exp. Psychol.*, 1956, 52, 13-17.—Used a design involving 3 levels of failure stress, 3 levels of task-induced stress, and 2 levels of anxiety (Taylor Scale). "Failure stress and task-induced stress produce significant decrements in . . . performance and significant effects in subjective reports of stressful experience. Manifest anxiety does not produce differential effects on performance. The several significant interactions between anxiety and the various experimental conditions indicate a possible 'priming' function of anxiety. 17 references."—J. Arbit.

5638. Freud, Anna. **Liv'ayat hatok'fanut b'yahas l'hitpathut har'gishut hanormalit v'hapatologit.** (The problem of aggression and its relation to the normal and pathological emotional development.) *Harefuah*, 1956, 50, 215-215.—Synthesis of sexual and aggressive drives is a normal phenomenon. Individual differences issue from the quantitative ratio between these 2 kinds of drives. This explains sadistic perversion, shyness, and the types of "good" and "bad" children. Most of these differences lie within the limits of normal phenomena. Recently, interest is growing in certain pathological situations (e.g., in orphans, D.P. children or children of disturbed parents), not arousing from aggression itself, but from lack of synthesis between it and sexual drives.—H. Ormian.

5639. Greenbaum, M. (U. Oregon, Eugene.) **Manifest anxiety and tachistoscopic recognition of facial photographs.** *Percept. Mot. Skills*, 1956, 6, 245-248.—48 high-anxiety and 48 low-anxiety Ss were assigned to a combination of treatments in order to evaluate the effects of varying situational conditions upon their interpersonal perceptions. It was found that the presence of an impending evaluation tended to lower the tachistoscopic threshold of high-anxiety Ss for the perception of hostile faces. Prior evaluations did not have this effect.—C. H. Ammons.

5640. Hambidge, Gove, Jr. **On the ontogenesis of repression.** *Psychoanal. Rev.*, 1956, 43, 195-203.—Repression is inner negativism or impulse negation which has become automatized and dropped out of awareness. This unconscious impulse negation protects the patient from frank, hostile, and self-destructive behavior consequent upon parental rejection and humiliation.—D. Prager.

5641. Hartocollis, Peter, & Johnson, Donald M. (Michigan State U., East Lansing.) **Differential effects of alcohol on verbal fluency.** *Quart. J. Stud. Alcohol*, 1956, 17, 183-189.—On three of four tests of word production, S's under influence of alcohol produced somewhat less; the exception was on tests with moderate degree of restriction where experimental S's relaxed their standards of conformity—it is presumed that something similar occurs in social situations where alcohol is reputed to increase fluency.—W. L. Wilkins.

5642. Hofstätter, Peter R. **Dimensionen des mimischen Ausdrucks.** (Dimensions of mimic expression.) *Z. exp. angewand. Psychol.*, 1955-56, 3, 505-529.—Rating profiles were constructed from the ratings of mimic expression (Frois-Wittmann-series) and verbal concepts according to 12 polar categories (e.g. weak-strong, sad-gay etc.). The profiles were converted into correlations. A factor analysis of the correlation-matrix yielded 4 factors. The 2 major factors were interpreted as positive attitude and nega-

tive attitude. The results indicate that Schlosberg's 3-dimensional system of emotional expression can be reduced to a 2-dimensional pattern. Therefore the method of polarity-profiles (semantic differential) appears as the most promising method in studies of mimic expression. 27 references. English and French summaries.—*W. J. Koppitz.*

5643. Lilly, John C. Mental effects of reduction of ordinary levels of physical stimuli on intact, healthy persons. *Psychiat. Res. Rep.*, 1956, No. 5, 1-9.—A review of autobiographical, clinical, and experimental studies on isolation is given. The conclusion is reached that such studies may clarify problems in the field of mental illness. Pp. 10-28 are given over to a discussion of the paper.—*L. A. Pennington.*

5644. London, Perry. Developmental aspects of discrimination in relation to adjustment. *Dissertation Abstr.*, 1956, 16, 1285.—Abstract.

5645. Myrick, R. (U. Oregon, Eugene.) Subject and stimulus pattern, a unidimensional relationship. *Percept. Mot. Skills*, 1956, 6, 261-267.—It is possible that Ss can be described from a single viewpoint, and also stimulus patterns or the environment from the same viewpoint, utilizing a normative group. An advantage of this form of description is that behavior in a known environment can be predicted arithmetically.—*C. H. Ammons.*

5646. Ranken, Howard Benedict. The effect of stimulus-response order on mediated association. *Dissertation Abstr.*, 1956, 16, 1512.—Abstract.

5647. Strasser, S. Das Gemüt; Grundgedanken zu einer phänomenologischen Philosophie und Theorie des menschlichen Gefühlslebens. (Affect; basic considerations of a phenomenological philosophy and theory of human affect life.) Utrecht: Uitgeverij het Spectrum; Freiburg: Herder, 1956. xix, 291 p.—In a phenomenological inquiry of the varied aspects of affect and emotion, the author surveys the contributions of Scheler, Sartre, Krueger, Stern, and Lersch. He then offers an integrative theory, based on a stratigraphic approach (Schichten-theorie.) Pleasurable emotions are discussed in detail, as experiences transcending their original sources. 584 references.—*H. P. David.*

5648. Szasz, Thomas S. Pain and pleasure; a study of bodily feelings. New York: Basic Books, Inc., 1957. xvi, 301 p. \$5.50.—The aim of this study has been "to isolate and describe in terms of appropriate abstractions the essential formal characteristics of pain and pleasure at different levels of symbolic development." These formal attributes are found to be the "framework of object relationships and the notion of psychological development." During early stages of the latter pain and pleasure are associated with ego orientations toward the body. Later on, in addition to the nature of the ego's object orientation, "it was found that the ego's experience of whether it is gaining or losing something needed furnishes another unifying concept around which pain and pleasure can be ordered. Thus losses are felt as pain or anxiety and gains as pleasure." 18-page bibliography.—*L. A. Pennington.*

5649. Watters, T. A. Forms of the family romance. *Psychoanal. Rev.*, 1956, 43, 204-213.—Principles are set forth pertaining to the operation of fantasy activated by experiences, misfortunes, and

disappointments in certain life periods. During prepuberty fantasies may be re-awakened and reworked according to emotional problems into a fabric called the family romance. This romance underlies some myth and legend formation as well as productions of great writers. When the romance is detected and studied it may lead the clinician quickly to vital areas of conflict where therapy can be effectively applied.—*D. Prager.*

5650. Webb, W. B., & Kaspar, J. C. (U. S. N. Sch. Aviat. Med., Pensacola, Fla.) The ability to reproduce task cues and the ability to perform the task. *Percept. Mot. Skills*, 1956, 6, 291-294.—73 students in flight training were asked to estimate the position of the horizon as seen from a cockpit when a number of aircraft maneuvers were specified. The less proficient group drew the horizon lower than the high proficiency group. In both groups there was a tendency to represent the angle of bank more flatly than the actual angle required. There was an individually consistent tendency from maneuver to maneuver to draw the horizon high or low and the angle of bank shallow or flat.—*C. H. Ammons.*

5651. Wodin, Anita H. (Schwartz). Prevailing mood as an affective determinant in perception, memory, association and associative reaction time. *Dissertation Abstr.*, 1956, 16, 1498-1499.—Abstract.

LEARNING & MEMORY

5652. Alekseeva, T. T., Kriuchkova, A. P., & Ostrovskaya, I. M. Kharakteristika uslovnorefleksionoi deiatel'nosti srosshikhshia bliznetsov. (Description of conditioned reflex activity in joined twins.) *Zh. vyssh. nervn. deiatel'.*, 1956, 6(1), 113-120.—A pair of twins, possessing a common blood circulation but separate nervous systems, were observed to exhibit different levels of excitability of individual organs and systems as well as different general behavior in spite of "absolute similarity of environment and rearing." A study of the conditioned reflexes in these twins at the age of 3 years, 6 months by the "motor method with verbal reinforcement" revealed individual peculiarities for each child, manifested in differences in rate of formation and consolidation of conditioned responses.—*I. D. London.*

5653. Angelini, Arrigo Leonardo. Sobre os efeitos da similaridade intra-serial e de graus de derivação inter-serial na aprendizagem verbal. (On the effects of intra-serial similarity and inter-serial degrees of derivation in verbal learning.) *Bol. Psicol. Educ. Univ. Sao Paulo*, 1953, 172, 112 p.—A report of a series of experiments involving intra-serial similarity in nonsense syllable lists and with lists derived from the original involving varying degrees of derivation. In terms of the concepts of generalization and derivation, the author establishes a deductive theory of the serial position curve, representing agreement with and extension of the theory of E. J. Gibson. Educational applications of his findings are suggested in the fields of foreign language instruction, Morse code and music.—*S. M. Sapon.*

5654. Anger, Douglas. (Upjohn Co., Kalamazoo, Mich.) The dependence of interresponse times upon the relative reinforcement of different interresponse times. *J. exp. Psychol.*, 1956, 52, 145-161.—"This study demonstrates that under some condi-

tions rats adjust the time intervals between bar presses, the interresponse times, according to the relative frequency with which reinforcements have followed the various interresponse times."—*J. Arbit.*

5655. Atkinson, Richard C. (*Indiana U., Bloomington.*) **An analysis of the effect of nonreinforced trials in terms of statistical learning theory.** *J. exp. Psychol.*, 1956, 52, 28-32.—On each trial a signal followed by one of two reinforcing lights is presented. S predicts which of the two lights will occur on each trial. This study deals with the effect of trials on which neither reinforcing light is presented. Findings may be accounted for in terms of the hypothesis requiring zero change in response probability on trials where no information is given.—*J. Arbit.*

5656. Baker, Katherine E., & Feldman, Herman. (*U. Nebraska, Lincoln.*) **Threshold-luminance for recognition in relation to frequency of prior exposure.** *Amer. J. Psychol.*, 1956, 69, 278-280.—"Each of 10 nonsense-words was exposed 1, 2, 5, 10, or 25 times to 12 Os, and recognition-thresholds were then measured in terms of the minimal luminance-level required for correct identification. Threshold-luminance, like threshold-duration, is a function of familiarity, but there seems to be differences in the two functions."—*R. H. Waters.*

5657. Belbin, Eunice, & Cane, Violet R. (*Applied Psychology Unit, Cambridge, Eng.*) **Some factors affecting response in recognition tests.** *Quart. J. exp. Psychol.*, 1956, 8, 45-53.—Subjects were shown 12 similar photographs and then given a 12 photograph recognition test of which a number from 0-12 had been in the original display. They tended to select 50% as having been seen previously. In a second and similar test which followed immediately there was a tendency to make more "yes" responses without any improvement in accuracy. When subjects were shown a picture and then immediately asked to describe it in terms of a multiple-choice recognition test and results were compared to subjects describing it in terms of a single-choice test, it was found that accuracy and certainty of decision varied with the nature of the choice situation.—*M. J. Wayner, Jr.*

5658. Berlin, Louis, & Wolff, Harold G. **Failure of conditioning in patients with cerebral lesions.** *J. nerv. ment. Dis.*, 1956, 123, 83-84.—Abstract and discussion.

5659. Bersh, P. J. (*Hum. Factors Lab., Rome Air Develpm. Center, N. Y.*), Notterman, J. M., & Schoenfeld, W. N. **Extinction of a human cardiac-response during avoidance-conditioning.** *Amer. J. Psychol.*, 1956, 69, 244-251.—The effect of avoidance-training on the extinction of a conditioned cardiac response (heart-beat rate) was analyzed in 3 closely related experiments. Results from 20 Ss indicate: (1) "that the cardiac CR tends toward extinction during the course of avoidance-responding," (2) that extinction is faster when an "exteroceptive signalling stimulus" (a light) is presented with a successful avoidance response, and (3) "that the effectiveness of such signalling may be ascribed to the development of discriminative control over the cardiac CR."—*R. H. Waters.*

5660. Bersh, Philip J., Notterman, Joseph M., & Schoenfeld, William N. **Generalization to varying**

tone frequencies as a function of intensity of unconditioned stimulus. *USAF Sch. Aviat. Med. Rep.*, 1956, No. 56-79, 4 p.—Employing conditioned heart rate as a measure of experimental anxiety, 2 groups of 20 male students each are conditioned through the use of a 1920 c.p.s. tone and irregularly paired electric shock as punishment. The results of the experiment indicate that the acquired anxiety generalizes to tones as a function of (1) the difference in frequency between the test tone and the original conditioning tone and (2) the intensity of the electric shock during the conditioning trials.

5661. Brackmann, John F., Jr. (*West Virginia U., Morgantown.*) **An interbehavioral analysis of sensory preconditioning.** *Psychol. Rec.*, 1956, 6, 24-26.—An experiment is described which supports the hypothesis that sensory preconditioning depends upon the "involvement of similar stimulus and response functions in the three stages of the experiment" and that the development of functions is "promoted more by consistent interbehavior with the stimulus objects than by varied interbehaviors." Suggested advantages of an interbehavioral analysis of sensory preconditioning are that it (1) directs the "researcher's attention to an important segment of the event under study: the interbehavior of the organism and the preconditioning stimulus objects," and (2) "enables description which is continuous with the event."—*P. Swartz.*

5662. Brand, Howard; Woods, Paul J., & Sakoda, James M. (*U. Connecticut, Storrs.*) **Anticipation of reward as a function of partial reinforcement.** *J. exp. Psychol.*, 1956, 52, 18-22.—Studied the effect of the probability ratio of reward and probability difference of reward in a two-choice learning task. Performance measures varied positively with probability difference of reward, but showed no consistent variation with probability ratio of reward.—*J. Arbit.*

5663. Brown, J. (*U. London, Eng.*) **Distortions in immediate memory.** *Quart. J. exp. Psychol.*, 1956, 8, 134-139.—Pairs of identical (unknown to the subjects) abstract geometrical figures were presented to subjects who judged whether a specified feature of the second member of each pair, which followed the first after a 10 second interval, had changed in one of 2 possible directions. A group of 32 subjects were not informed of the critical feature until the presentation of the second member. A second group of 32 were told before presentation of the first member. "Subjects in each group were significantly consistent with one another in some of their judgments, thus indicating that distortions in remembering had occurred."—*M. J. Wayner, Jr.*

5664. Brown, Janet L. (*Yale U., New Haven, Conn.*) **The effect of drive on learning with secondary reinforcement.** *J. comp. physiol. Psychol.*, 1956, 49, 254-260.—Rats were given a three-part training in which (1) food pellets were paired with light and buzzer, (2) bar-pressing was rewarded by light and buzzer, and (3) the bar-pressing response was extinguished and then re-established. Results showed that rats given secondary reinforcement training performed better than controls on the instrumental response. While drive affected performance, the high drive group being superior, there was no evidence for differential habit strength of the high

and low drive conditions. It was concluded that, within the conditions of the experiment, "hunger drive affects performance but does not affect the secondary reinforcing power acquired by a neutral stimulus or the habit strength of a new response reinforced by secondary reinforcement."—*L. I. O'Kelly.*

5665. Buss, Arnold H. (Carter Memorial Hosp., Indianapolis, Ind.) **Reversal and nonreversal shifts in concept formation with partial reinforcement eliminated.** *J. exp. Psychol.*, 1956, 52, 162-166.—Found that a reversal shift resulted in significantly faster learning than a nonreversal shift in the absence of partial reinforcement. This finding is interpreted as supporting the Kendler-D'Amato mediational theory of concept formation.—*J. Arbit.*

5666. Buzzotta, V. Ralph. **Association-probability in the study of verbal behavior.** *Dissertation Abstr.*, 1956, 16, 1722-1723.—Abstract.

5667. Calvin, Allen D., & Williams, Clarence M. (Michigan State U., East Lansing.) **Simultaneous and successive discrimination in a single-unit hollow-square maze.** *J. exp. Psychol.*, 1956, 52, 47-50.—Found no significant difference in errors between the two discrimination groups. Further analysis of the simultaneous group in terms of those who had to approach the light and those who had to avoid it indicated that those who had to approach the light were inferior to the successive animals while those who had to avoid light were superior to the successive group.—*J. Arbit.*

5668. Campbell, Donald T. (Northwestern U., Evanston, Ill.) **Adaptive behavior from random response.** *Behav. Sci.*, 1956, 1, 105-110.—Learning theories contain assumptions about selective processes operating on initially random responses. The concept of random variations properly selected has been carefully spelled out and applied to the construction of a model by Ashby. The relationship between learning theories based upon living organisms and this model are noted. 25 references.—*J. Arbit.*

5669. Castaneda, Alfred. (State U. Iowa, Iowa City.) **Effects of stress on complex learning and performance.** *J. exp. Psychol.*, 1956, 52, 9-12.—"The present study was concerned with performance in a second task as a function of task pacing and whether the S-R pairs to be relearned were identical to those learned in the first task or were required to be re-paired. . . . A significant interaction between these two variables was found. While the simple effects were not statistically significant they did tend to indicate that the stress condition resulted in fewer errors on the unchanged pairs in comparison to non-stress and in comparatively more errors on the changed pairs."—*J. Arbit.*

5670. Castaneda, Alfred; Palermo, David S., & McCandless, Boyd R. **Complex learning and performance as a function of anxiety in children and task difficulty.** *Child Developm.*, 1956, 27, 327-332.—The study dealt with "the performance of fifth grade children in a complex learning task as a function of their scores on a scale of manifest anxiety adapted from Taylor's adult form. . . ."—*L. S. Baker.*

5671. Church, Russell M., Brush, F. Robert, & Solomon, Richard L. (Harvard U., Cambridge, Mass.) **Traumatic avoidance learning: the effects of CS-US interval with a delayed-conditioning**

procedure in a free-responding situation. *J. comp. physiol. Psychol.*, 1956, 49, 301-308.—Dogs trained with a delayed-conditioning avoidance procedure with CS-US intervals of 5, 10 or 20 sec. were compared with similar groups that had been trained in a trace conditioning procedure. Speed of acquisition was similar, but resistance to extinction was greater in the delayed-conditioning technique. With the trace procedure, the shorter the CS-US interval, the faster the rate of learning, the greater resistance to extinction and the lower the rate of spontaneous jumping; in the delayed procedure these measures were independent of the CS-US interval.—*L. I. O'Kelly.*

5672. Cook, Thomas W. **Transfer and ability.** *Bull. Marit. psychol. Ass.*, 1956, 5, 6-11.—On the basis of the proposals (1) that the measurement of abilities depends upon semi-stabilized performance at "crude limits of learning," and (2) that transfer is central in explaining how abilities are developed," the author advances 8 hypotheses; several of these are interpretations and extensions of Ferguson's concepts, and others are reformulations required by logical and empirical evidence.—*A. E. Harriman.*

5673. Davenport, John Warner. **Choice behavior as a function of drive strength and rate of learning.** *Dissertation Abstr.*, 1956, 16, 1723.—Abstract.

5674. Davidon, R. S. (Bryn Mawr Coll., Pa.) **Learning in an object-grouping experiment.** *Percept. Mot. Skills*, 1956, 6, 241-244.—14 college students were asked to group the same common objects into as many groups as possible in two sessions a week apart. One sample saw pictures both times and the other corresponding names. With names, although fewer groups were formed, groups contained significantly more objects. Less than half of the groups were exactly repeated at the later session, though Ss were instructed to do so. All Ss formed more groups during the second session than during the first.—*C. H. Ammons.*

5675. Delgado, José M. R., Rosvold, H. Enger, & Looney, Edmund. (Yale U., New Haven, Conn.) **Evoking conditioned fear by electrical stimulation of subcortical structures in the monkey brain.** *J. comp. physiol. Psychol.*, 1956, 49, 373-380.—Electrodes were implanted in various subcortical areas of monkeys who had been trained to avoid shock to the feet. Stimulation of the medial nucleus of the amygdala, trigeminal nerve at the Gasserian ganglion, rostral part of pons, medial part of mesencephalon, nucleus ventralis posteromedialis, external parts of the n. ventralis posterolateralis of the thalamus and external medullary lamina of pallidum all elicited a conditioned fear response. Stimulation of sensorimotor cortex or pathways and a number of thalamic and hippocampal structures were ineffective. "The results suggest that fear may be induced by electrical stimulation of some structures, not others. The structures from which fear was elicited appear to be related to the limbic system." 20 references.—*L. I. O'Kelly.*

5676. Denny, M. Ray, & Martindale, Robert L. (Mich. St. U., East Lansing.) **The effect of the initial reinforcement on response tendency.** *J. exp. Psychol.*, 1956, 52, 95-100.—This study supports the hypothesis that the learning of an instrumental response can occur on the first rewarded trial and re-

futes the hypothesis that reinforcement is dependent upon the confirmation of an expectancy. Immediate secondary reinforcement in instrumental-reward learning appears to be the principle operating here. The essential property of reinforcement is an immediate approach to the food and thus instrumental-reward learning becomes akin to classical conditioning.—*J. Arbit.*

5677. Dent, Ralph W. **Memory and the aging process.** *Bull. Marit. psychol. Ass.*, 1956, 5, 12-15.—This study ascertained the period of life at which three age groups (18-29, 30-50, and 60-80) exhibited the most frequent memory associations. Subjects were asked to associate a life experience with each of one hundred words taken from two word association tests and then to report time in life at which each experience had occurred. "It becomes apparent that somewhere between the ages of 30 and 40 the tendency to associate experiences to recent years disappears and memory regression becomes quite common. By the time a subject reaches the age of 70 the greatest percentage of experiences are associated with childhood."—*A. E. Harriman.*

5678. Dews, Peter B. (*Harvard Med. Sch., Boston, Mass.*) **Studies on behavior. I. Differential sensitivity to pentobarbital of pecking performance in pigeons depending on the schedule of reward.** *J. Pharmacol.*, 1955, 113, 393-401.—The effect of intramuscular pentobarbital on the pecking response of pigeons in a Skinner box was compared for a schedule in which the first response after a fixed interval of 15-minutes was rewarded (15'FI) and for a fixed ratio schedule where every 50th response was rewarded (FR 50). "Pecking of the birds on 15'FI was markedly reduced by doses of pentobarbital [e.g. 1 mgm] which had no effect, or caused an increase in rate of pecking of the same birds working on FR 50." No changes in the behavior of the birds were detectable by gross observation at this dose level.—*G. A. Heise.*

5679. Dews, Peter B. (*Harvard Med. Sch., Boston, Mass.*) **Studies on behavior. II. The effects of pentobarbital, methamphetamine, and scopolamine on performances in pigeons involving discriminations.** *J. Pharmacol.*, 1955, 115, 380-389.—Pigeons learned to discriminate between various environmental stimuli in a Skinner box. "When the stimulus appropriate to rewards was a red light behind the translucent [pecking] disc and the stimulus appropriate to no rewards was a blue light, then [the discrimination] was not disrupted by pentobarbital, methamphetamine, or scopolamine. . . ." When the reward for pecking in the presence of a particular color was conditional upon the presence or absence of a differently located white light (the house light) ". . . then the [discrimination] between sets of stimuli was reduced by pentobarbital and methamphetamine, but not by scopolamine."—*G. A. Heise.*

5680. Digman, John M. (*U. Hawaii, Honolulu.*) **Performance under optimal practice conditions following three degrees of massing of early practice.** *J. exp. Psychol.*, 1956, 52, 189-193.—"When the posttest performance curves of the three groups were adjusted for differences in initial ability, there was no evidence of permanent decrement. Temporary decrement was present on the first posttest trial, but was apparently quickly dissipated. The performance

curves of the three groups, following the one-week interval between trials, were remarkably similar. Warm-up after massed practice and during relearning, and the failure to find evidence of permanent work decrement, were explained in terms of transfer theory." 8 references.—*J. Arbit.*

5681. Dinsmoor, James A., & Hughes, Lawson H. (*Indiana U., Bloomington.*) **Training rats to press a bar to turn off shock.** *J. comp. physiol. Psychol.*, 1956, 49, 235-238.—Preliminary experiments in training rats to terminate electrical shock by pressing a lever are reported. Learning is rapid; latency is less for a 0.4ma current than for a 0.2ma current. Intershock intervals of 5, 10, 20 and 40 seconds were investigated. Mean latencies declined up to 20 seconds for the stronger shock group and up to 40 seconds for the weaker shock group.—*L. I. O'Kelly.*

5682. Dykman, Roscoe A., Gantt, W. Horsley, & Whitehorn, John C. (*U. Arkansas, Little Rock.*) **Conditioning as emotional sensitization and differentiation.** *Psychol. Monogr.*, 1956, 70(15), No. 422, 17 p.—A report on a research "to study certain cardiovascular aspects of motor learning in a conditioning situation where the motor conditional reflex (cr) would be contrasted with the associated cardiac changes at various stages of the development of both responses." The results are summarized by the investigators who state: ". . . we believe that normal, healthy learning is characterized by an integration of autonomic and motor responses at both the emotional and the problem-solving levels. It is suggested that any lack of integration (schizokinesis) occurring at any point in the conditioning process is indicative of psychopathology."—*M. A. Seidenfeld.*

5683. Edwards, Ward. (*A. F. Personn. & Train. Res. Cent., Lackland AFB, Texas.*) **Reward probability, amount, and information as determiners of sequential two-alternative decisions.** *J. exp. Psychol.*, 1956, 52, 177-188.—"This paper reports two experiments in which probability of reward, amount of reward, and the nature of the information available to Ss about the reward pattern were systematically varied in a two-alternative situation in which Ss operated a slot machine for real money. It was found that both probability and amount of reward strongly influenced choices, and information about reward pattern influenced choices to some extent." 20 references.—*J. Arbit.*

5684. Eingold, Bernard. **Problem-solving by mature rats as conditioned by the length, and age at imposition, of earlier free-environmental experience.** *Dissertation Abstr.*, 1956, 16, 1723-1724.—Abstract.

5685. Eisman, Eugene, (*U. California, Riverside.*), Asimow, Adele, & Maltzman, Irving. **Habit strength as a function of drive in a brightness discrimination problem.** *J. exp. Psychol.*, 1956, 52, 58-64.—Three groups of rats learned a black-white discrimination (white positive) under three hunger conditions. Each group divided into three subgroups corresponding to the three drive levels and retrained to black-positive. The lack of difference between the two low drive groups during original and reversal learning led to a two parameter definition of drive (function of total deprivation time and deprivation at time of running). Superiority of the high drive group on all measures of original learning and

greater resistance to extinction during reversal was explained on the basis of the initial extinction of differences during reversal learning and it was concluded that habit strength is a function of drive during learning.—*J. Arbit.*

5686. Elam, Claude B., & Tyler, D. Winfred. **The discrimination hypothesis and cue reversal.** *USAF Sch. Aviat. Med. Rep.*, 1956, No. 56-82, 3 p.—14 *Macaca mulatta* (rhesus) monkeys, divided into 2 matched groups, were presented with a simultaneous discrimination problem in the Wisconsin General Test Apparatus. The reinforcement relationship was consistent with a given stimulus block in the case of one group, but was inconsistent for the other group. After 8 days of training, both groups were presented a cue-reversal problem. It was found that animals presented the consistent relationship reversed more rapidly than did the other group despite their earlier demonstrated preference for the formerly positive stimulus. The results favor an interpretation based upon the discrimination hypothesis.

5687. Ellen, Paul. (U. Michigan, Ann Arbor.) **The compulsive nature of abnormal fixations.** *J. comp. physiol. Psychol.*, 1956, 49, 309-317.—After production of abnormal fixations in rats they were presented with three-window situations in which there were two possible variations: two or one window on the fixated side, each situation being presented to all rats on alternate days. It was found that when but one window was on the fixated side the rat would jump to that side irrespective of the nature of the stimulus card in the window, but when there were two windows on the fixated side the rat would choose the positive card significantly often. It is concluded that "when the expression of adaptive behavior is made compatible with fixated behavior . . . the learned adaptive behavior readily comes to expression."—*L. I. O'Kelly.*

5688. Essman, W. B. (U. North Dakota, Grand Forks.) **Effect of reinforcement schedule on perceptual learning without awareness.** *Percept. Mot. Skills*, 1956, 6, 268.—Verbal reinforcement of Ss' placement of each of 60 ink blots in one of 4 categories was varied from 0%, to 50% to 100% of the time for either of 2 out of 4 categories. Significant differences in response frequency during acquisition are found between groups with and without reinforcement. The difference between the two reinforced groups was not significant. Ss were not aware of the relationship between reinforcement and their responses. Greatest resistance to extinction was found in the partially reinforced group.—*C. H. Ammons.*

5689. Fehrer, Elizabeth. (Brooklyn Coll., N. Y.) **Effects of amount of reinforcement and of pre- and postreinforcement delays on learning and extinction.** *J. exp. Psychol.*, 1956, 52, 167-176.—Varying the amount of reinforcement and the amount of time spent in the goal box had no effect upon the number of errors or running speed of rats run to the same number of trials. Animals delayed in the goal box after the reward has been removed show greater resistance to extinction. These results are explained on the basis of partial reinforcement theories. 19 references.—*J. Arbit.*

5690. Freitag, Melvin. **A test of primary stimulus generalization by the single-stimulus training**

technique. *Dissertation Abstr.*, 1956, 16, 1724.—Abstract.

5691. Gentry, George; Kaplan, Sylvan J., & Iscoe, Ira. **Studies in abstractive generalization; comparison between monkeys and children on tests of learning and transfer ability.** *USAF Sch. Aviat. Med. Rep.*, 1956, No. 55-9, 11 p.—Comparisons between monkeys and children were made of rates of learning and degrees of transfer on critical tests designed to reflect capacity for abstractive generalization. Results demonstrate the superiority of the children over the monkeys on all tests given. The findings of this study suggest the need for caution in generalizing the behavioral effects of ionizing radiation upon monkeys to that which might be predicted for man under comparable conditions.

5692. Gewirtz, Jacob L., Jones, Lyle V., & Waerneryd, Karl-Erik. (U. Chicago, Ill.) **Stimulus units and range of experienced stimuli as determinants of generalization-discrimination gradients.** *J. exp. Psychol.*, 1956, 52, 51-57.—Investigated "the effects of psychological vs. physical stimulus units and central tendency, determined by earlier experience with the stimulus dimension, upon generalization-discrimination gradients. A stimulus dimension of visual angle and a voluntary motor response were employed." Found that "individual response gradients for Ss initially presented stimuli in the center range exhibited steeper slopes than those for Ss initially presented an off-center stimulus range . . . response gradients of individual Ss, both in the center and off-center stimulus ranges, were displaced significantly in the direction of their previous experience with the stimulus dimension."—*J. Arbit.*

5693. Gibson, Eleanor J., & Walk, Richard D. (Cornell U., Ithaca, N. Y.) **The effect of prolonged exposure to visually presented patterns on learning to discriminate them.** *J. comp. physiol. Psychol.*, 1956, 49, 239-242.—Albino rats reared in cages whose walls had mounted black circles and triangles against a white background later learned a circle-triangle discrimination problem significantly faster than did a control group raised in cages in all ways similar with the exception of the circular and triangular figures. "It was concluded that visual experience with the forms to be discriminated, even in the absence of differential reinforcement, facilitated the discrimination learning."—*L. I. O'Kelly.*

5694. Gibson, James J., & Gibson, Eleanor J. **Perceptual learning: differentiation or enrichment?** *Americana*, 1956, 2, 83-94.—Translated into Japanese from *Psychol. Rev.*, 1955, 62, 32-41 (see 29: 8374).

5695. Gochman, Stanley Irwin. **Personality dynamics and learning: a study of individual differences in learning, retention, transfer of training, and speed of reaction as functions of personality.** *Dissertation Abstr.*, 1956, 16, 1503.—Abstract.

5696. Goldstein, Myron. (Lowry AFB, Colo.) **A proficiency measure for temporal integration of components in a perceptual-motor task.** *USAF Person. Train. Res. Cent., Res. Rep.*, 1955, No. AFPTRC-TN-55-35, v, 14 p.—The triggering component of the pedestal sight gunnery task poses a problem in proficiency measurement. Skill is not reflected by sheer amount of triggering; it is rather

a function of the extent to which moments of triggering are made to coincide with moments of accuracy in the other components. A new score, D , is proposed which compares the performance of subjects with expected results for a random automatic triggering device. It is somewhat in error, due to contaminating influences which may be removed by covariance analysis to yield a corrected score, D_c . The D_c score allows the subject to choose his amount of triggering at will, so long as the integration of triggering with moments of accuracy in the other components is maximal.—S. B. Sells.

5697. Green, Edward J. (Dartmouth Coll., Hanover, N. H.) Stimulus-variability and operant discrimination in human subjects. *Amer. J. Psychol.*, 1956, 69, 269-273.—The prediction, derived from statistical learning theory, that in stimulus-discrimination, elements which are not common to Subsets SD_1 and SD_2 that are to be discriminated, and which have high θ -values, would facilitate discrimination, while elements which have low θ -values would lead to slower changes in behavior was tested using different patterns of blacked-in circles in a 9-circle matrix on 4 groups of 5 Ss each. The prediction was confirmed for both conditioning and extinction.—R. H. Waters.

5698. Hayward, Herbert C. The effects of varied pre-experimental environments on open field behavior and elevated maze learning in the rat. *Dissertation Abstr.*, 1956, 16, 1511.—Abstract.

5699. Nelson, R. M., & Cover, A. (Smith Coll., Northampton, Mass.) Specificity-generalizability of classificatory categories as a variable in recall. *Percept Mot. Skills*, 1956, 6, 233-236.—74 Ss classified names of famous persons into either specific or general categories, then attempted to recall the names. Results showed that Ss using specific categories recalled significantly more names with fewer errors than Ss using general categories. Results support the interpretation that greater amounts of pro-active interference occurred in recall of items from the large general categories than in recall of items from the smaller specific categories.—C. H. Ammons.

5700. Herman, David T., & Kenyon, Grant Y. (U. Wichita, Kans.) A contribution toward interbehavioral analysis: I. Some general concepts. *Psychol. Rec.*, 1956, 6, 33-38.—It is suggested that behavioral events in the learning-extinction process must be regarded as "historically and functionally interrelated." The learned action behavior segment is described as evolving as an "integration of separate behavior segments." The perceptual reaction system is suggested as the "focal point . . . of development and dissolution of particular stimulus function-response function coordinations." The need is noted for studies to determine the applicability of the construct of implicit interaction in describing rat behavior in standard laboratory situations.—P. Swartz.

5701. Himelstein, Philip. (VA Hosp., Roanoke, Va.) Anxiety and goal-setting behavior. *J. clin. Psychol.*, 1956, 12, 287-288.—Two tasks—a finger maze and a series of digit symbols—were given to 112 college students who were divided into three groups on the basis of their Taylor Anxiety scores and to 30 non-psychotic psychiatric patients exhibiting anxiety reactions. Glixman's procedure was used to define ego- and non-ego-involvement. No sig-

nificant differences between the D-scores of the four groups were found for either ego- or non-ego-involved tasks.—L. B. Heathers.

5702. Hurwitz, H. M. B., & Rowell, J. Discriminatory learning and motivation. *Brit. J. Anim. Behav.*, 1956, 4, 80-81.—Abstract.

5703. Jacobsen, Erik, & Skaarup, Y. Experimental induction of conflict behavior in cats: its use in pharmacological investigations. *Acta pharm. tox., Kbh.*, 1955, 11, 117-124.—A method for assessing the effects of drugs was developed using the techniques originated by Masserman. Cats learned to execute a "feeding cycle," in which they operated a bell signal and then obtained food by lifting the hinged lid of a food box. Conflict behavior was produced by subjecting the animals to an air blast from the food box. Manifestations of this behavior were: (1) decrease in number and increase in duration of the feeding cycles, (2) fear of food box, (3) displacement activities, and (4) vegetative reactions such as vomiting.—G. A. Heise.

5704. Jacobsen, Erik, & Sonne, Else. (Medinalco, Ltd., Copenhagen.) The effect of benzilic acid diethylamino-ethylester, HCl (benactyzine) on stress-induced behavior in the rat. *Acta pharm. tox., Kbh.*, 1955, 11, 135-147.—Rats learning to avoid shock by moving to the opposite compartment of a shuttle box at the sound of a buzzer were observed during the 2-second buzzer-shock interval, and rated on continuum from "very tense" to "relaxed" on the basis of 16 behavioral criteria. Whereas saline-injected rats typically remained "tense" during this interval, rats injected with benactyzine usually showed a complete or partial loss of "tension." The authors also report an increase in the frequency of avoidance responses under benactyzine.—G. A. Heise.

5705. Jaynes, Julian. (Yale U., New Haven, Conn.) Imprinting: the interaction of learned and innate behavior: I. Development and generalization. *J. comp. physiol. Psychol.*, 1956, 49, 201-206.—A study of imprinting phenomena in 18 domestic neonate chicks showed that the following response to a moving object was part of a matrix of responses that included vocalization, attention and approaching. The reaction appeared suddenly within a few minutes of exposure and develops with gradual improvement over the first four days. Innate preferences appear, some objects providing better cues than others. There is a generalization decrement, strange objects being followed less well than those to which the bird was trained.—L. J. O'Kelly.

5706. Jeeves, M. A., & North, A. J. Irrelevant or partially correlated stimuli in discrimination learning. *J. exp. Psychol.*, 1956, 52, 90-94.—Further data on the continuity-noncontinuity theories of discrimination learning. Found that an irrelevant stimulus does not necessarily interfere with learning to discriminate a critical stimulus, nor does its previous irrelevance subsequently affect its discrimination as a critical stimulus. A stimulus partially correlated with the critical stimulus does not necessarily interfere with or enhance learning to discriminate a critical stimulus, and subsequent discrimination of such a stimulus depends on whether it has been more often positive or negative. These data appear to favor the continuity theory of discrimination learning.—J. Arbit.

5707. Kamin, Leon J. The effects of termination of the CS and avoidance of the US on avoidance learning. *J. comp. physiol. Psychol.*, 1956, 49, 420-424.—Using 32 hooded rats and a 2×2 factorial design in a shuttlebox, the effects of avoidance of the US and response termination of the CS were both significant, both resulting in more responding and shorter latencies. 15 references.—L. I. O'Kelly.
5708. Kaplan, Sylvan J., Melching, William H., & Gentry, George. Studies in abstractive generalization; evaluations of the facilitating effects of training techniques upon transfer. *USAF Sch. Aviat. Med. Rep.*, 1955, No. 55-1, 7 p.—3 groups of chimpanzees were subjected to different training techniques, and the influence of these techniques upon transfer of training was tested. None of the groups exhibited rapid transfer, and no group transferred more rapidly than any other group. The results were interpreted as providing little or no evidence that the chimpanzee has a capacity for abstractive generalization. It is suggested that caution be used when translating the effects of noxious agents upon the chimpanzee's intellectual functions to their probable effects upon man.
5709. Knopfmacher, F., Khairy, Melek; Russell, R. W., & Yudkin, John. (U. London, Eng.) Some effects of thiamine deficiency and reduced caloric intake on "behavior under stress" and on learning. *Quart. J. exp. Psychol.*, 1956, 8, 54-65.— "... there were no significant effects of thiamine deficiency on behaviour prior to the onset of polyneuritis with its debilitating effects on motor co-ordination ... no evidence of impairment in any of the behaviour studied which could be attributed to restrictions in caloric intake ... even though the restrictions continued for a period of somewhat more than twelve months. ... Animals whose feeding was restricted were more active and, during the soluble phase of one discrimination situation, showed more vicarious trial and error and learned more readily than animals fed *ad libitum* on the same diet."—M. J. Wayner, Jr.
5710. Krech, David; Rosenzweig, Mark R., & Bennett, Edward L. Dimensions of discrimination and level of cholinesterase activity in the cerebral cortex of the rat. *J. comp. physiol. Psychol.*, 1956, 49, 261-268.—Using male hooded rats, a high correlation was established between cholinesterase level and problem solving ability in the Krech Hypothesis Apparatus. The data suggest that "behavioral differences between the animals high and low in ChE activity levels indicate a differential ability to shift the dimension of discrimination, such that a high ChE level is associated with an ability to maintain a probabilistic response pattern, while a low ChE level is associated with a more thorough commitment to the dominant stimulus." ChE is thought to provide an index of the readiness of nerve impulse transmission in the c.n.s., and thus of capacity for adaptive behavior.—L. I. O'Kelly.
5711. Lapina, I. A. Vyrabotka uslovnogo tormoza k odnostonnemu refleksu. (Elaboration of conditioned inhibition for a unilateral conditioned reflex.) *Zh. vyssh. nervn. Deiatel.*, 1956, 6(1), 121-126.—Conditioned inhibition with reference to a unilateral conditioned reflex was studied in 4 dogs, operatively prepared in such a way that the symmetrical portions of the posterior part of the tongue, which were to be stimulated, were extruded under the mandible onto the surface of the cheek. Employment of the conditioned inhibitory stimulus resulted in a prolonged inhibition similar to "pathological irradiation of inhibition." Although the conditioned inhibitory stimulus was applied daily, the inhibition did not "concentrate in the course of two years."—I. D. London.
5712. Lee, William Allen. Indices of verbal response probability. *Dissertation Abstr.*, 1956, 16, 1725.—Abstract.
5713. Levitt, Eugene E. (Inst. Juvenile Res., Chicago, Ill.) A methodological study of the preparation of connected verbal stimuli for quantitative memory experiments. *J. exp. Psychol.*, 1956, 52, 33-38.— "... differences in either mean number of words per idea group, or in the variability of the number of words per idea group, can affect experimental findings significantly, and may obscure measurement of the experimental variable. Relative position of Ss in a group are not affected by either type of difference. The use of the grammatical idea group was recommended as a method of preparing stimuli which will eliminate confounding differences in division."—J. Arbit.
5714. Lewis, D., & Miles, G. H. (State U. Iowa, Iowa City.) Retroactive interference in performance on the Star Discrimeter as a function of amount of interpolated learning. *Percept. Mot. Skills*, 1956, 6, 295-298.—90 female Ss were assigned randomly in equal numbers to a control and 5 experimental groups. All Ss began with the same amount of practice on Task A, then had different numbers of trials on Task B, and finally relearned Task A. Losses in proficiency, signifying retroactive interference, were present during initial RL trials of the 5 experimental groups. Amount and persistence of interference were increasing functions of amount of IL, up to the maximal amount given.—C. H. Ammons.
5715. Lewis, Donald J., & Duncan, Carl P. (Northwestern U., Evanston, Ill.) Effect of different percentages of money reward on extinction of a lever-pulling response. *J. exp. Psychol.*, 1956, 52, 23-27.—The first eight trials were the acquisition series: no S ever won again. Measured total number of plays before S's decision to quit. Found an inverse relation between percentage of reinforcement and number of plays to quitting. This relationship is explained in terms of the ease of discriminating between the acquisition and extinction series.—J. Arbit.
5716. Logan, Frank A., Beier, Eileen M., & Kincaid, Wendell D. Extinction following partial and varied reinforcement. *J. exp. Psychol.*, 1956, 52, 65-70.—Attempts to fit the finding that partial reinforcement results in greater resistance to extinction than continuous reinforcement within an S-R reinforcement theory. Studying the effects of varied delay and varied magnitude of reinforcement upon extinction concluded that "resistance to extinction is assumed to be increased by any training procedure which permits extinction of the fractional anticipatory goal response to the cues which occur on non-reinforced trials after the regular time of reinforcement."—J. Arbit.
5717. Lyman, Bernard Everett. Vigilance and conditioned avoidance acquisition in the goat: an

ethological approach. *Dissertation Abstr.*, 1956, 16, 1725-1726.—Abstract.

5718. Mahrer, Alvin R. (Ohio State U., Columbus.) The role of expectancy in delayed reinforcement. *J. exp. Psychol.*, 1956, 52, 101-106.—"This study introduces Rotter's expectancy construct as an important factor in delayed reinforcement situations. The hypotheses were: (a) other factors being equal, the preference strength for a delayed reward will be low, moderate, or high as the expectancy for the occurrence of the delayed rewards is respectively low, moderate, or high; (b) social agents (i.e., Es) will serve as cues for different levels of expectancy." These hypotheses were supported. 15 references.—*J. Arbit.*

5719. Mainord, Willard Alwin. Experimental repression related to coping and avoidance behaviors in the recall and relearning of nonsense syllables. *Dissertation Abstr.*, 1956, 16, 1719.—Abstract.

5720. Mandler, George, & Heinemann, Shirley H. (Harvard U., Cambridge, Mass.) Effect of overlearning of a verbal response on transfer of training. *J. exp. Psychol.*, 1956, 52, 39-46.—Different groups of Ss given various amounts of training to associate three-place consonants with numbers. Various transfer conditions were then begun. Learning a new response to an old stimulus showed no consistent transfer effects. Learning an old response to a new stimulus showed increasing positive transfer as amount of original learning increased. Learning an old response to an old stimulus also showed increasing positive transfer as amount of original learning increased. Discussion is in terms of a comparable study utilizing motor responses.—*J. Arbit.*

5721. Manning, Horace M. (U. Minnesota, Minneapolis.) The effect of varying conditions of hunger and thirst on two responses learned to hunger or thirst alone. *J. comp. physiol. Psychol.*, 1956, 49, 249-253.—After preliminary training in a T-maze to run discriminatively to appropriate incentive substances when hungry or thirsty, rats were tested under the various combinations (16) of 0, 11, 23 and 35 hrs. of food and/or water deprivation. Results indicated: (1) "... a tendency for responses to a given drive to increase with the level of deprivation of that drive, and to continue to do so beyond the level of deprivation of training," and (2) "with hunger and thirst drives combined, a tendency was evident for food choices to predominate at higher levels of deprivation."—*L. I. O'Kelly.*

5722. Markov, KH. M. Vliianie gemotransfuzionnogo shoka na vysshuiu nervnuu deiatel'nost' i uroven' kroviannogo davleniia u sobak. (Effect of hemotransfusion shock on higher nervous activity and blood pressure level in dogs.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6(1), 137-145.—In a study, conducted on dogs, utilizing the "conditioned electrodefensive reflex method," it was ascertained that hemotransfusion shocks for the neurotic dog bring on a more pronounced inhibition of conditioned reflexes with a subsequent intensification. The changes in higher nervous activity were induced by the injection of a small dose of heterogeneous (rabbit) blood (0.3 ml per 1 kg of the animal's weight).—*I. D. London.*

5723. Melton, Arthur W. Present accomplishment and future trends in problem-solving and learning theory. *Amer. Psychologist*, 1956, 11, 278-281.—"To me, one obvious criticism of what has happened in the last 25 years is the domination of theories of learning by the rat." "I predict that there will be a social revolution among students of learning wherein man re-establishes his dominance over the rat." "My prediction is ... a frontal attack on the problem of achieving a descriptive schema for identifying samples of human learning, and for identifying primary task variables." The notion "must be overcome" that "the stimulus is a simple punctiform affair ... that can be dealt with as though it occurred without context. ..."—*S. J. Lachman.*

5724. Miles, James English, & Rosvold, H. Enger. (Yale U., New Haven, Conn.) The effect of prefrontal lobotomy in rhesus monkeys on delayed-response performance motivated by pain-shock. *J. comp. physiol. Psychol.*, 1956, 49, 286-292.—Monkeys trained in delayed alternation and discrimination with food-reward motivation and in a delayed response with shock-escape motivation either before or after prefrontal lobotomy showed the following effects of the operation: "prefrontal lobotomy in monkeys results in impairment in delayed response performance whether motivated by escape from pain or food. The anatomical results suggest that the caudate nucleus may have been involved in these changes."—*L. I. O'Kelly.*

5725. Miles, Raymond C., & Meyer, Donald R. (Ohio State U., Columbus.) Learning sets in marmosets. *J. comp. physiol. Psychol.*, 1956, 49, 219-222.—Marmosets are capable of forming discrimination learning sets, but when their performance is compared with that of the rhesus monkey the marmoset is greatly inferior, although the qualitative aspects of performance were similar. It is concluded that "tests of interproblem transfer provide discriminative indices of phylogenetic status, and that marmoset behavior can be meaningfully assessed in psychoneurological studies with the same procedures that have been developed for the higher members of the primate order."—*L. I. O'Kelly.*

5726. Miller, R. E., & Murphy, J. V. (U. Pittsburgh, Pa.) Social interactions of rhesus monkeys: II. Effects of social interaction on the learning of discrimination tasks. *J. comp. physiol. Psychol.*, 1956, 49, 207-211.—Social groups of monkeys learned an oddity task significantly faster, but did not learn an object-quality discrimination any faster than control animals. "It was concluded that the effect of social interaction upon learning was a function, in part, of the complexity of the learning task."—*L. I. O'Kelly.*

5727. Moltz, Howard, & Maddi, Salvatore R. (Brooklyn Coll., N. Y.) Reduction of secondary reward value as a function of drive strength during latent extinction. *J. exp. Psychol.*, 1956, 52, 71-76.—In a study of latent extinction (the weakening of a learned response without the response itself being performed) found that the higher the drive level during latent extinction the greater is the reduction in secondary reward value as measured by the capacity of cues previously associated with reward to mediate the learning of a new response. The find-

ings were discussed in terms of fractional anticipatory response mechanisms. 12 references.—*J. Arbit.*

5728. Moon, Louis E., & Lodahl, Thomas M. (U. Wisconsin, Madison.) The reinforcing effect of changes in illumination on lever-pressing in the monkey. *Amer. J. Psychol.*, 1956, 69, 288-290.—20 rhesus monkeys were placed in a situation in which pressing a lever would produce a change in the illumination. For 10 of them the change was an increment, for the other 10, a decrement. Eleven control animals were placed in the same situation but for them no change in illumination followed lever-pressing. Results indicate an increase in lever-pressing when followed by change in illumination, either an increment or a decrement.—*R. H. Waters.*

5729. Murphy, J. V., & Miller, R. E. (U. Pittsburgh, Pa.) Spaced and massed practice with a methodological consideration of avoidance conditioning. *J. exp. Psychol.*, 1956, 52, 77-81.—Studied conditioned avoidance responses in rats in order to determine the effect of massed and spaced trials on resistance to extinction and the methodological importance of reducing the total amount of time to condition and extinguish the response. Found that "progressively massing trials during conditioning with massed trials throughout extinction resulted in significantly increased resistance to extinction. It was noted that this finding is contrary to predictions from fatigue theories of extinction and an alternative interpretation was presented." 19 references.—*J. Arbit.*

5730. Mushkina, N. A. Dinamika vyrabotki nalichnykh i sledovykh uslovykh refleksov ugnetiia al'fa-ritma i differentsirovok k nim. (Dynamics of the formation of immediate and delayed conditioned-reflex suppression of the alpha rhythm and of its differentiations.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6(1), 157-163.—There are 3 phases which are to be noted in the development of delayed conditioned-reflex suppression of the alpha-rhythm and which proceed differently in the visual and auditory analyzers: (1) "generalization," (2) "gradual concentration," (3) "complete concentration."—*I. D. London.*

5731. Nikitina, G. M. Razvitiye orientirovchnogo i dvigatel'nogo uslovnogo refleksov s oboniatel'nogo analizatora u shcheniat v ontogeneze. (Ontogenetic development of orientive and motor conditioned reflexes involving the olfactory analyzer.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6(1), 127-136.—The interdependence between the rate of establishment and the nature of the "conditioned defensive shaking reaction" to olfactory stimuli was ascertained, as well as the rate and nature of extinction of the orientive reaction as a function of the animal's age and its individual characteristics. The typical interdependence between the development of orientive and conditioned motor reactions in the early period of ontogenesis reflects the close functional interaction obtaining between the subcortical formations and the cerebral cortex which plays the dominant role.—*I. D. London.*

5732. Palermo, David S., Castenada, Alfred, & McCandless, Boyd R. The relationship of anxiety in children to performance in a complex learning task. *Child Develpm.*, 1956, 27, 333-337.—The relationship between motivational level and performance in a trial-and-error learning situation is studied.

High motivation (anxious) subjects were found to make significantly more errors in the task.—*L. S. Baker.*

5733. Parducci, Allen. (Swarthmore Coll., Pa.) Incidental learning of stimulus frequencies in the establishment of judgment scales. *J. exp. Psychol.*, 1956, 52, 112-118.—Ss were exposed to a series of unjudged stimuli under instructions to respond to some irrelevant characteristic of the stimuli and the effects of this incidental exposure compared to the more traditional exposure procedures. Found that judgment scales may be incidentally learned but that this learning is less effective and more subject to interference. The "establishment of an absolute judgment scale involves the acquisition of information about the distribution of the stimuli presented for judgment."—*J. Arbit.*

5734. Peterson, Lloyd R. (U. Minnesota, Minneapolis.) Variable delayed reinforcement. *J. comp. physiol. Psychol.*, 1956, 49, 232-234.—Rats run on a straightaway under a variety of delayed-reinforcement conditions ran more slowly than animals immediately reinforced. Delayed reinforcement groups were more resistant to extinction.—*L. I. O'Kelly.*

5735. Plenderleith, Mavis, & Postman, Leo. (U. California, Berkeley.) Discrimination and verbal habits in incidental learning. *Amer. J. Psychol.*, 1956, 69, 236-243.—Two conditions of both intentional and incidental learning are: (1) S's ability to discriminate stimulus materials along more than one dimension (to maintain a multiple set), and (2) the availability to S of effective differential responses. Analysis of the operation of these conditions leads to the predictions: (1) degree of incidental, as contrasted with intentional, learning should show a higher correlation with discriminative and verbal skills, and (2) correlation of degree of intentional with these skills and with incidental learning should increase with an increase of complexity of learning task. These predictions were confirmed by the performance of 100 Ss in an incidental and an intentional learning task, a type of span of apprehension problem, and in anagram solution.—*R. H. Waters.*

5736. Postman, Leo, & Rosenzweig, Mark R. (U. California, Berkeley.) Practice and transfer in the visual and auditory recognition of verbal stimuli. *Amer. J. Psychol.*, 1956, 69, 209-226.—The effect of prior visual or auditory practice on the recognition-thresholds, visual or auditory, of nonsense-syllables was tested on 4 groups of 25 Ss each. Two additional groups served as controls for visual and auditory recognition-thresholds. Frequency of prior practice ranged from 0 to 15 repetitions of the items. Such practice is a determinant of lower recognition-thresholds. The effect was more pronounced in auditory than in visual discrimination, also when the same modality is employed in both practice and test. Transfer from visual training to auditory test was greater than in the reverse direction. The preliminary practice is effective through its causing a reduction in possible alternative responses.—*R. H. Waters.*

5737. Pubols, Benjamin H., Jr. (U. Wisconsin, Madison.) The facilitation of visual and spatial discrimination reversal by overlearning. *J. comp. physiol. Psychol.*, 1956, 49, 243-248.—Two experi-

ments are described demonstrating the facilitating effect of over-learning a first discrimination on learning the reverse discrimination in either visual or position discrimination situations. Albino rats were used in both experiments and adequate controls were exercised for the effects of position preferences.—L. I. O'Kelly.

5738. Ralph, Kathryn Magaw. **Selective recall of completed and incomplete tasks as a function of age and instructions.** *Dissertation Abstr.*, 1956, 16, 1728-1729.—Abstract.

5739. Riggs, M. N. **Recall and organization of aggressive words under varied conditions of emphasis.** *Percept. Mot. Skills*, 1956, 6, 273-284.—339 Ss were asked to recall a randomized list of 40 nouns, 10 each from categories of names, animals, schemata, and violence. Increased configural emphasis on violent words tended to increase recall but had little or no effect on organization; the sensitizing influence of prior exposure to aggressive content increased both organization and recall, the effect being more consistent and significant for organization. The results were interpreted as consonant with Bousfield's extension of Hebbian theory, and with Gestalt theory.—C. H. Ammons.

5740. Rosenblum, Sidney. **The effects of differential reinforcement and motivation on prediction responses of children.** *Child Developm.*, 1956, 27, 99-108.—The study was designed to investigate the "acquisition and extinction of a response, namely, the degree of certainty with which a child makes a prediction concerning the occurrence of a success experience for himself, under 3 schedules of reinforcement." The results are considered "consistent with the findings of continuous and partial reinforcement research . . . of . . . more rapid acquisition of behavior under continuous than partial reinforcement."—L. S. Baker.

5741. Rosvold, H. Enger, & Delgado, José M. R. (Yale U., New Haven, Conn.) **The effect on delayed-alternation test performance of stimulating or destroying electrically structures within the frontal lobes of the monkey's brain.** *J. comp. physiol. Psychol.*, 1956, 49, 365-372.—From electrodes implanted in various loci within the frontal lobes of monkeys, the effects of stimulation and later of destruction around the site of implantation on visual discrimination and delayed alternation were determined. Stimulation in the region of the head of the caudate nucleus impaired alternation without affecting visual discrimination, as did tissue destruction in the same site. Hyperactivity and impaired gastrointestinal function followed stimulation and destruction of caudate nucleus and putamen tissue. It is suggested that the defects in alternation, activity and gastrointestinal functions which follow prefrontal lobotomy may be due to damage to the corpus striatum and not to destruction of the thalamo-cortical projections.—L. I. O'Kelly.

5742. Saltzman, Irving J. (Indiana U., Bloomington.) **Comparisons of incidental and intentional learning with different orienting tasks.** *Amer. J. Psychol.*, 1956, 69, 274-277.—Differences in immediate recall following incidental or intentional learning are shown to be dependent upon the nature of the orienting task imposed. The results were ob-

tained from a total of 200 Ss and 5 different orienting tasks.—R. H. Waters.

5743. Schoenfeld, W. N., Cumming, W. W., & Hearst, E. (Columbia U., New York.) **On the classification of reinforcement schedules.** *Proc. nat. Acad. Sci., Wash.*, 1956, 42, 563-570.—The relative density of responses under ratio and interval schedules can be accounted for from a simple model based on consideration of alternating time intervals during which reinforcement respectively does (t^D) or does not (t^A) follow responses occurring in that interval. An organism on a particular schedule is actually, then, reinforced according to the interval between its successive responses, i.e., for a given rate of responding which then becomes characteristic of that schedule. Rate can be controlled by varying either parameter: $t^D/t^D + t^A$, or $t^D + t^A$, and any reinforcement schedule used can be described in terms of these parameters.—M. M. Berkun.

5744. Scott, Earl D., & Wike, Edward I. (U. Kansas, Lawrence.) **The effect of partially delayed reinforcement and trial-distribution on the extinction of an instrumental response.** *Amer. J. Psychol.*, 1956, 69, 264-268.—". . . partial delay of reinforcement (of a running response) produces greater resistance to extinction than does immediate reinforcement. This effect . . . is unrelated to the distribution of training or extinction trials (and) constitutes a problem for behavior-theory. . . ."—R. H. Waters.

5745. Shepard, Winifred O., & Schaeffer, Maurice. **The effect of concept knowledge on discrimination learning.** *Child Developm.*, 1956, 27, 173-178.

5746. Skipin, G. V. **K voprosu o lokalizatsii protsessu uslovnogo (vnutrennego) tormozheniia u sobak.** (On the localization of the process of conditioned (internal) inhibition in dogs.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6(1), 22-31.—A detailed description in Pavlovian terms is given of the development of conditioned inhibition. It is concluded that conditioned inhibition is not localized in the "cortical analyzer, to which the extinguishing stimulus is addressed, but somewhere along the path from the cells of [this] cortical analyzer to the effectuating apparatuses—in the first place, along the path to the cortical representative of the unconditioned alimentary reflex and, in the second place, in the giant pyramidal cells of the cortex."—I. D. London.

5747. Smith, Richard P., Wagman, Althea I., & Riopelle, Arthur J. (Emory U., Ga.) **Effects of reserpine on conditioned avoidance behavior in normal and brain-operated monkeys.** *J. Pharmacol.*, 1956, 117, 136-141.—Brain-operated rhesus monkeys and non-operated control monkeys were injected with reserpine after they had been trained to jump over a barrier in a shuttle-box to avoid shock. A decrement in the avoidance response was observed which was proportional to the dosage of the drug and reached a maximum 4 to 6 hours after injection. Complete recovery of the response occurred 10 hours after the injection. "Non operated animals were affected more severely than were the control animals. Animals with lesions in the temporal lobes showed greater sparing than animals with frontal lesions."—G. A. Heise.

5748. Spiker, Charles C. The stimulus generalization gradient as a function of the intensity of stimulus lights. *Child Develpm.*, 1956, 27, 85-98.—"This experiment is primarily concerned with the study of the effects on generalization of the number of reinforcements with the conditioned stimulus and with the effects of the absolute brightness of the stimuli on the magnitude and shape of the generalization gradient."—L. S. Baker.

5749. Spiker, Charles C. (U. Iowa, Iowa City.) Stimulus pretraining and subsequent performance in the delayed reaction experiment. *J. exp. Psychol.*, 1956, 52, 107-111.—Tested the hypothesis that the possession by children of names for the stimuli leads to more correct choices following a delay period. Found support for this hypothesis with the younger children showing a greater difference due to the learning of the names for the stimuli. Concludes that the possession of verbal names for the stimuli permits S to produce a representation of the absent stimuli during the delay period. 14 references.—J. Arbit.

5750. Spiker, Charles C., Gerjuoy, Irma R., & Shepard, Winifred O. (Iowa Child Welfare Res. Sta., Ames.) Children's concept of middle-sizedness and performance on the intermediate size problem. *J. comp. physiol. Psychol.*, 1956, 49, 416-419.—The hypothesis "that the learning of a discrimination problem involving selection of the intermediate sized of three stimuli, where the absolute size . . . vary from trial to trial, is facilitated by S's possession of the verbal concept middle-sized" was tested experimentally. The results "indicated that an understanding of the concept of middle-sizedness facilitated learning of the relational task more than it did the learning of the nonrelational task."—L. I. O'Kelly.

5751. Stevenson, Harold W., & Moushegian, George. (U. Texas, Austin.) The effect of instruction and degree of training on shifts of discriminative responses. *Amer. J. Psychol.*, 1956, 69, 281-284.—Three groups of 27 human Ss were given different amounts of training on a size-discrimination task and then required, without warning, to master a position-discrimination task. Another group, following minimal training, was warned that the problem would change. Results indicate that degree of training on the first was positively related to mastery of the second problem, that perseveration errors were unrelated to degree of original training, and that the warning facilitated the shift to and solution of the second problem.—R. H. Waters.

5752. Stolurow, Lawrence M., Hodgson, Thomas F., & Silva, John. (U. Illinois, Urbana.) Transfer and retroaction effects of "association reversal" and "familiarization" training in trouble shooting. *Psychol. Monogr.*, 1956, 70(12) (No. 419), 23 p.—"When trainees learned association in one direction and then in the reverse direction—association reversal—with one minor exception, either small or moderate amounts of negative transfer were found." They found, however, that "positive transfer effects were found under association reversal when the first task was practiced to a relatively high level . . . before training in the reverse direction was undertaken." Finally they note that "either no interference or a small amount of improved recall resulted from a

relatively large amount of interpolated practice of associations in the reverse direction of that originally learned."—M. A. Seidenfeld.

5753. Stone, Calvin, P., & Bakhtiari, A. B. (Stanford U., Calif.) Effects of electroconvulsive shock on maze relearning by albino rats. *J. comp. physiol. Psychol.*, 1956, 49, 318-320.—After 40 1-per-day trials on a 13-unit water maze, a 40-day rest was given. Experimental animals were given one ECS per day the last 10 days of the rest interval and the first 10 days of a 25-day retention and relearning period. The ECS group showed marked inferiority in retention and relearning up to four days after cessation of the shock period.—L. I. O'Kelly.

5754. Straughan, James H. (Indiana U., Bloomington.) Human escape learning in relation to reinforcement variables and intertrial conditions. *J. exp. Psychol.*, 1956, 52, 1-8.—The independent variables were probability of reinforcement, presence or absence of a distracting task between trials, and intensity of the reinforcing tone. ". . . response probability tended in most cases to match probability of reinforcement; learning was generally slower with the distracting task; and stimulus intensity had little effect. Predictions made on the basis of statistical learning theory appear to be largely verified."—J. Arbit.

5755. Taylor, Jean Grove, & Smith, Patricia Cain. An investigation of the shape of learning curves for industrial motor tasks. *J. appl. Psychol.*, 1956, 40, 142-149.—"Seventy learning curves from operators on twelve power sewing-machine operations were analyzed. Using the period of initial plateau as a criterion of learning, modified Vincent curves were established for each job, and separate composite curves for each of 2 groups including half the jobs."—P. Ash.

5756. Thaler, Margaret. Effects of stressful situations on learning. *Psychiat. Res. Rep.*, 1956, No. 3, 46-49.—"There exist many possible instances for collaborative research on physiological and psychological responses to stress." A selected review of the topic is given with particular reference to learning and retention.—L. A. Pennington.

5757. Thompson, Robert, & Pryer, Ronald S. (Louisiana State U., Baton Rouge.) The effect of anoxia on the retention of a discrimination habit. *J. comp. physiol. Psychol.*, 1956, 49, 297-300.—After training on a horizontal-vertical discrimination problem, rats were exposed to anoxia (20,000 ft. for 10 min.) either 2 min., 15 min., 1 hr., or 4 hr. after achieving the criterion. Results showed significant deficit on retraining for animals receiving anoxia within 2 min. after completion of original learning.—L. I. O'Kelly.

5758. Trotter, J. R. (U. Oxford, Eng.) The physical properties of bar-pressing behavior and the problem of reactive inhibition. *Quart. J. exp. Psychol.*, 1956, 8, 97-106.—A critical review of the terminology and literature on the weighted bar type of apparatus used in studies on reactive inhibition is presented. "An experiment using apparatus which gives a continuous record of the force which a rat applies to a knob produces the following results. After much practice, pressing becomes sharp and brief and the amount of activity per reward is reduced.

Under conditions of no (intentional) secondary reward the amount of activity during extinction is at first positively correlated with the average activity per reward during training, but the correlation diminishes as extinction proceeds. With auditory secondary reward there is no correlation."—*M. J. Wayner, Jr.*

5759. Underwood, Benton J., & Richardson, Jack. (Northwestern U., Evanston, Ill.) **The influence of meaningfulness, intralist similarity, and serial position on retention.** *J. exp. Psychol.*, 1956, 52, 119-126.—"1. In learning, the lower the intralist similarity the faster the learning and the higher the meaningfulness the faster the learning. . . . 2. For low meaningfulness, recall was significantly better with low intralist similarity than with high intralist similarity. No difference was observed for the high-meaningful lists. 3. Meaningfulness did not significantly influence recall. 4. Recall was not related to serial position when response strengths at end of learning were equalized for all serial positions. . . . The results provide strong support to a general theory of interference as a prime cause of forgetting and to Gibson's theory in particular." 16 references.—*J. Arbit.*

5760. Verhave, Thom. **The effects of varying the concentration of a sucrose solution used as a reinforcing agent in a chaining situation.** *Dissertation Abstr.*, 1956, 16, 1513.—Abstract.

5761. Warren, J. M., & Baron, Alan. (U. Oregon, Eugene.) **The formation of learning sets by cats.** *J. comp. physiol. Psychol.*, 1956, 49, 227-231.—Cats tested on object-discrimination and sign-differentiated position discriminations showed significant interproblem transfer, performance being better on the object discrimination problems. "It was concluded that cats show less interproblem transfer and reach an apparently asymptotic level of performance much sooner than monkeys."—*L. I. O'Kelly.*

5762. Weiss, Bernard. **The effects of various morphine-n-allyl-normorphine ratios on behavior.** *USAF Sch. Aviat. Med. Rep.*, 1956, No. 56-4, 6 p.—The effects on complex performance of various morphine-nalorphine combinations were gaged by observing the behavior of albino rats on a fixed-interval reinforcement schedule in the Skinner box. Nalorphine impaired performance in 2 ways: (1) it produced a depression in response rate; (2) it made the distribution of responses between reinforcements less optimal.

5763. Weiss, Bernard, & Danford, M. Bryan. **Reward value of heat at low temperatures during inanition and pantothenic acid deprivation.** *USAF Sch. Aviat. Med. Rep.*, 1956, No. 56-72, 6 p.—Albino rats were trained to obtain a burst of heat from a heat lamp by pressing a lever. It was found that the frequency of responding at an ambient temperature of 0°C. could be raised by restricting food intake. Combining pantothenic acid deprivation with food deprivation resulted in a significant increment of heat-rewarded responses.

5764. Weiss, Bernard, & Moore, Edwin W. (USAF Sch. Aviat. Med., Randolph Field, Tex.) **Drive level as a factor in distribution of responses in fixed-interval reinforcement.** *J. exp. Psychol.*, 1956, 52, 82-84.—Two groups of albino rats differing

in degree of food deprivation time were trained on a fixed-interval reinforcement schedule in a Skinner box. Additional practice on this task revealed that drive affects the rate of responding without altering the distribution of responses in the interval between reinforcements and that response rate increases from the beginning to the end of the inter-reinforcement interval.—*J. Arbit.*

(See also abstracts 5258, 5261, 5326, 5868, 6581)

THINKING & IMAGINATION

5765. Arshavsky, Sh. **Darkhey hahashiva hay'ila.** (Ways of efficient thinking.) *Hahinukh*, 1955/56, 28, 368-377.—A speculative inquiry, based on experiments. Every problem of inductive thinking demands "to find premises as necessary to convince a given conclusion."—*H. Ormian.*

5766. Eisenbud, Jule. **Time and the Oedipus.** *Psychoanal. Quart.*, 1956, 25, 363-384.—Precognitive phenomena which appear as dreams, the residues of which do not occur until after the dream, may be linked to the dreamer's fantasized triumph over time in an attempt to deny the essential harshness of his unalterable position in the family constellation and the unresolved oedipal conflict.—*L. N. Solomon.*

5767. Foss, B. M. **Consciousness and meaning.** *Acta psychol.*, 1956, 12, 192-197.—It has been argued that, in thinking, some aspects of behavior are "reflected in consciousness;" that these aspects may cease to reach consciousness through repetition. When this happens in the case of an object's being linked with a verbal response, the response acquires "meaning" when the intervening links cease to reach consciousness, or, perhaps, cease to exist.—*G. Rubin-Rabson.*

5768. Heglin, Howard J. (Interceptor Pilot Res. Lab., Tyndall AFB, Fla.) **Problem solving set in different age groups.** *J. Geront.*, 1957, 11, 310-317.—50 men and women in 3 age groups, young, middle-aged and old, were studied using 2 psychological tests. The tests were designed to reveal possible age differences in set phenomena. One test was the Luchins Water Jars Test and the other was an adaptation of an alphabet maze. "The middle-age group showed less set and the younger group least. However, the middle-age group showed least set after training. The older subjects improved least with training. Individual exceptions to all of the group trends were apparent."—*J. E. Birren.*

5769. Hicks, Leslie H. (U. Wisconsin, Madison.) **An analysis of number-concept formation in the rhesus monkey.** *J. comp. physiol. Psychol.*, 1956, 49, 212-218.—The results of this experiment show that the rhesus monkey can gain moderate proficiency in acquisition of the concept of threeness.—*L. I. O'Kelly.*

5770. Hurst, Paul M. (Idaho St. Coll., Pocatello), & Siegel, Sidney. **Prediction of decisions from a higher ordered metric scale of utility.** *J. exp. Psychol.*, 1956, 52, 138-144.—A comparison of the efficiency of two models for predicting decisions in an uncertain outcome situation: a model based on the higher ordered metric measurement of utility, and the objective value model. Confirmed the hypothesis that Ss will make decisions so as to maximize expected

utility rather than expected objective value. Also found that errors of prediction from a higher ordered metric scale occur when one or more of the decisions on which the scale is based are made between two alternatives which are indiscriminable in expected utility. The discrepancy between these results and those obtained in previous research is explained in terms of measurement procedures and the selection of Ss.—*J. Arbit.*

5771. Knapp, Peter Hobart. **Sensory impressions in dreams.** *Psychoanal. Quart.*, 1956, 25, 325-347.—"A survey of five hundred fifty-four dreams from various sources showed that color first, then sound and kinesthesia, and last smell and taste appeared in statistically consistent and progressively smaller fractions of the total number of dreams." Sensory impressions in dreams are discussed in conjunction with repression, sense of reality, affect, and symbolic language in dreams. An appendix discussing material, methods and statistical comparisons is included. 27 references.—*L. N. Solomon.*

5772. Kogan, Zuce. **Essentials in problem solving.** (2d ed.) New York: Arco Publishing Co., 1956. 119 p. \$4.00.—A "how-to-do-it" book about "creative thinking" written by an engineer for engineers and industrialists, in the main. Discusses rules and procedures and cites numerous examples (many from the author's own experience).—*J. Arbit.*

5773. Luborsky, Lester, & Shevrin, Howard. (Menninger Foundation, Topeka, Kans.) **Dreams and day-residues: a study of the Poetzl observation.** *Bull. Menninger Clin.*, 1956, 20, 135-147.—Poetzl observed that, when a person is shown a picture very briefly, he reports seeing only a part of it, but if he is asked to bring in a dream on the following day, he will report details which go far toward completing the picture itself. A systematic repetition of the Poetzl experiment revealed the commonness of the phenomenon and the conditions of its occurrence. It was shown to be a special case of a process which was signaled by more evidences of defensive activities than omission of parts of the picture. Recovery of percepts occurred under other conditions than the dream state.—*W. A. Varcel.*

5774. Palm, Rose. **Comparative study of symbol formation in Rorschach test and dream.** *Psychoanal. Rev.*, 1956, 43, 246-251.—In the Rorschach and in the dream there is a loosening of reality testing with ego regression and breaking through of repressed wishes representative of id instincts. A major difference is that during sleep, reality cathexis is nearly completely abrogated but not so during the Rorschach. "To our knowledge, the idea of Rorschach condensation, i.e., of the multiple meaning of the Rorschach symbol, has not been previously considered in the literature."—*D. Prager.*

5775. Rom, Paul. **Remarks on the interpretation of one's own dreams.** *Amer. J. indiv. Psychol.*, 1956, 12, 84-87.—3 examples of how interpretation of one's dreams can foster self-improvement are presented.—*A. R. Howard.*

5776. Schroeder, Pearl. **Conceptual flexibility in grouping behavior.** *Dissertation Abstr.*, 1956, 16, 1729-1730.—Abstract.

(See also abstracts 5384, 5618)

INTELLIGENCE

5777. Dominicus van den Bussche, H. K. **Erfeelbaarheid en sociaal evenwicht.** (Genetics and social equilibrium.) *Ned. Tijdschr. Psychol.*, 1956, 11, 469-521.—The author shows that the intelligence distribution of the general population appears to be regulated and stabilized by what he calls an "inbuilt" mechanism, thus compensating very efficiently for disturbances in the reproduction-rate equilibrium. It is argued that a sterilization of mental defectives would effect only a very small decrease in the occurrence of the various degrees of feeble-mindedness. All analyses and computations in this article are based on the I.Q.—*R. H. Howtink.*

5778. Pinard, Adrien; Barbeau, Gérard L., Laurendeau, Monique, & Parant, Claude. **Tests différentiels d'intelligence.** (Differential tests of intelligence.) Montréal, Can.: Institut de Psychologie, Université de Montréal, 1954. 322 p.—This book has as its principal object constructing, refining, and norming an analytic test of intelligence based upon 5 types of intellectual functions: logical (abstract and concrete), inventive (abstract and concrete), and perceptual. A preliminary experimental battery of 22 group and 7 individually administered subtests was tried out with 50 "meticulously chosen subjects" and reduced to 15 improved subtests, 3 for each of the functions. Norms were then based upon the scores of 117 high school seniors. Directions for administering and scoring the final test and an abbreviated scale of five subtests (absurd statements, seriation of objects, Roback's "ingenuity" problems, incomplete stories, and block counting) are provided. 64-item bibliography.—*J. C. Stanley.*

5779. Sarason, Irwin G. (Indiana U., Bloomington.) **The relationship of anxiety and "lack of defensiveness" to intellectual performance.** *J. consult. Psychol.*, 1956, 20, 220-222.—"This experiment was performed to evaluate the effects of anxiety (Taylor-scale scores) and defensiveness (MMPI K-scale scores) on intellectual performance (ACE scores and grade-point averages). The results failed to show significant changes in these two measures of intellectual performance as a function of anxiety. However, Ss low in defensiveness were found to perform significantly more poorly on the ACE than did all other Ss in the K-scale distribution. A similar trend was found for the grade-point averages. The results were discussed in terms of the adverse effect of the self-criticism of low K Ss on their performance in highly motivating situations."—*A. J. Bachrach.*

(See also abstracts 5255, 5631, 5788, 6544)

PERSONALITY

5780. Alawi, A. H. (U. Peshawar, Pakistan.) **Scientific approach to the study of personality.** *J. Univ. Peshawar*, 1956, No. 5, 1-13.—This is a popular review of the psychological approach to understanding human nature. Psychoanalytical theory of personality structure is especially emphasized, and its bases are traced to the Holy Koran. Modern measurement techniques are described and objectives and principles of measurement are defined with reference to Pakistani life. 18 references.—*A. H. Alawi.*

5781. Bardon, Jack I. **Self-other impressions of mothers and sons as a function of the sons' socio-personal adequacy.** *Dissertation Abstr.*, 1956, 16, 1499.—Abstract.

5782. Bergler, Edmund. **Keeping one's ambivalences apart.** *Psychoanal. Rev.*, 1956, 43, 243-245.—A patient became masochistically attached to the image of his cruel mother and tried to escape by creating a fantasy of the "nice woman." When he was confronted with this split-off duality as original unity he reacted with marked incredulity.—D. Prager.

5783. Coleman, Marie L. **Externalization of the toxic introject.** *Psychoanal. Rev.*, 1956, 43, 235-242.—". . . resistances which have become a nuclear part of the ego through introjection of an unhealthy object imago cannot be resolved through objective, verbal interpretation alone, but . . . the unhealthy object imago must be felt again by the patient as an external object or force, to enable him to develop a new response to the pathological ego nucleus." The therapeutic technique of externalizing or mirroring the pathological introject is manipulative and shocking until the healthy ego processes based on deepened insight come into play. The outraged protest is often the birth cry of a healthy ego.—D. Prager.

5784. Eysenck, H. J. **The inheritance and nature of extraversion.** *Eugen. Rev.*, 1956, 48, 23-30.—The study used 52 pairs of twins, equally divided as to zygosity and sex, to test the hypothesis that extraversion and introversion are determined by hereditary influences to an appreciable degree. Greatest inter-twin difference was observed for the extraversion factor, which appears to be determined by heredity to as large an extent as intelligence is. Also found was the fact that hysterics are much more difficult to condition on the eye-blink than are dysthymics, with normals running intermediate between the two. The same was found for reactions to a kinesthetic test.—G. C. Schwesinger.

5785. Feshbach, Norma D. **The non-conformity of high status individuals: an experimental investigation.** *Dissertation Abstr.*, 1956, 16, 1489.—Abstract.

5786. Fine, Reuben. **Psychoanalytic observations on chess and chess masters.** *Psychoanalysis*, 1956, 4(3), 7-77.—The literature shows agreement that a combination of homosexual and hostile impulses is sublimated in chess. Chess becomes a means of working out the son-father rivalry. Chess lends itself to conflicts surrounding aggression. Chess offers libidinal and ego gratifications. There is no clear cut type of chess player. The ego of the chess player is in many respects the opposite of that of the overt homosexual. The ego weakness of the chess player lies mainly in an accentuation of the narcissistic factor. The all-important and weak King stands for the boy's penis in the phallic stage, the self-image of the man, and the father cut down to the boy's size. Chess players are men drawn chiefly from intellectual and scientific fields. The personalities of nine world chess champions of the past century are described. 39 references.—D. Prager.

5787. Fricke, Benno G. (U. Michigan, Ann Arbor.) **A configural-content-intensity item for personality measurement.** *Educ. psychol. Measmt.*, 1956, 16, 54-62.—"The configural-content-intensity

item consists of a pair of statements linked in an unusual way. To each of the paired statements the test taker is asked to indicate True in column one or False in column two. A third response forces (or allows) him to reveal the intensity of his agreement with responses he made to the content of the statements." Artificial data are presented to demonstrate how such items may differentiate between 2 criterion groups.—W. Coleman.

5788. Grunes, Mark. **Some aspects of conscience and their relationship to intelligence.** *Dissertation Abstr.*, 1956, 16, 1282-1283.—Abstract.

5789. Guilford, J. P., & Zimmerman, Wayne S. (U. Southern California, Los Angeles.) **Fourteen dimensions of temperament.** *Psychol. Monogr.*, 1956, 70(10) (No. 417), 26 p.—"The purpose of this investigation was to re-examine the potential evidence for and against the existence of the 13 factors purported to be measured by the Guilford-Martin personality inventories." Based on the results, the authors conclude that: (1) "The number of dimensions needed to account for the intercorrelations is at least 14, the number that could not be considered as residual factors." (2) It was found desirable to modify to some extent most of the factors and as a result of these changes "a revised list of the properties of each factor" is included; and (3) they conclude that "better writing can do much to discriminate among the factors and to clarify information about their inter-correlations."—M. A. Seidenfeld.

5790. Hörmann, Hans. **Zum Problem der psychischen Starrheit (Rigidität).** (The problem of rigidity.) *Z. exp. angewand. Psychol.*, 1955-56, 3, 662-683.—A review of the literature reveals that difficulties arise from the lack of generality of rigidity. Results by the author demonstrate variability of various measures of rigidity as well as considerable individual differences. The influence of these results in respect to factor analytical studies and to diagnosis is discussed. 129-item bibliography. English and French summaries.—W. J. Koppitz.

5791. Irvine, La Verne Fisher. **Intensity of attitude, personality variables and attitude change.** *Dissertation Abstr.*, 1956, 16, 1519.—Abstract.

5792. Johnson, Donald M., & Vidulich, Robert N. (Mich. State U., Lansing.) **Experimental manipulation of the halo effect.** *J. appl. Psychol.*, 1956, 40, 130-134.—To test the hypothesis that halo effect is a judgmental error rather than the effect of objective correlation of traits, one group (N=18) rated 5 noted individuals, one individual per day on all of 5 traits, while another group (N=18) rated all 5 individuals on one trait per day. The authors state that the results prove that halo is in part a phenomenon of judgment.—P. Ash.

5793. Johnson, Paul E. (Boston U. Sch. Theol., Boston, Mass.) **Personality and religion.** New York: Abingdon Press, 1957. 297 p. \$4.50.—Personality is defined and illustrated by a case. Freud's theory of infancy, childhood according to Lewin, youth according to Sullivan and Allport's views of maturity are presented with a story of a girl's life illustrating the principles of development. The lonely person, conditions of religious growth and an example in the life of an Egyptian, adventures of a religious person, personality under stress, Anton

Boison, psycho-therapy and religion, dimensions of personality, and search for ultimate being are discussed.—G. K. Morlan.

5794. Mühle, Günther. Die Lehre vom Temperament unter strukturpsychologischem Gesichtspunkt. (The theory of temperament from the structural-psychological point of view.) *Psychol. Rdsch.*, 1954, 5, 161-176.

5795. Newcomb, Theodore M. Personality and social change; attitude formation in a student community. New York: Dryden, 1943, reissue 1957. xii, 225 p. \$3.25.—As a result of numerous requests for a book which has been o.p. for some time, the author and publisher have reissued this publication (see 17: 3460) in a form identical with that of the original with the exception of corrections of a few typographical errors.—M. O. Wilson.

5796. Ostlund, Leonard A. (Okla. A. & M. Coll., Stillwater.) A matrix for the representation of environmental-personality relationships. *Proc. Okla. Acad. Sci.*, 1954, 35, 118.—Abstract.

5797. Riemer, Svend. (U. California, Los Angeles.) Is the culture-personality approach at all possible? *Sociol. soc. Res.*, 1956, 40, 320-324.—The culture-personality approach is useful if limited to problems of social motivation. Sociologically and psychologically relevant motivation are 2 entirely different things. In answering the question in the title in the affirmative, the author states that it is far from self evident and must be loaded with heavy qualifications.—S. M. Amatora.

5798. Rosenberger, Litz. Hearot bidvar itsuv ha "ani." (Remarks about the shaping of the "ego.") *Ofakim*, 1956, 10, 160-163.—"Special attention is paid to-day to the development of this institution within the personality, which is responsible for its behavior and reactions," i.e. the ego developed from the id. Examples and illustrations are brought, in order to explain imagination and identification as 2 important moments in the development of the ego during the childhood.—H. Ormian.

5799. Schlegel, Willhart S. Körper und Seele; eine Konstitutionslehre für Aerzte, Juristen, Pädagogen und Theologen. (Body and soul; a theory of constitutional types for physicians, jurists, pedagogues and theologians.) Stuttgart, Germany: Ferdinand Enke, 1957. vi, 180 p. DM 19.50.—Based on a research of 20 years and exact anthropological measurements of about 10,000 persons, numerous correlations between anatomical and psychological characteristics have been discovered. The author arrives at the distinction of variations between the types of 2 series, i.e., the opposites of the athletic-asthenic and the andromorph-gynaecomorph types. The psychological correlates are found by applying the methods of interview and of various personality and projective tests. The sexuality of the types, the pathology of sexual behavior, the problems of criminality and constitutional therapy are discussed. Extensive bibliography.—M. Haas.

5800. Shipley, Thomas E., Jr. Threat to the self, the direction and breadth of attention, and the distance gradient. *Dissertation Abstr.*, 1956, 16, 1730.—Abstract.

5801. Weybrew, Benjamin Brunner. Predicting adjustment to long periods of confinement: a

study in factor analytic methodology. *Dissertation Abstr.*, 1956, 16, 1497-1498.—Abstract.

(See also abstracts 5478, 5631, 5928, 6321, 6621)

AESTHETICS

5802. Aigrisse, Gilberte. L'évolution du symbole chez Van Gogh. (Evolution of the symbol in Van Gogh.) *Psyché, Paris*, 1954, 9, 310-318.—This is the introduction to a larger study dealing with Van Gogh's attempts to deal with his disturbed psychic life and his psychotic episodes, the choice of symbols being related to specific symptoms of psychopathology.—M. D. Stein.

5803. Durrant, D. W. (General Electric Co., Ltd., Wembley, Eng.) Decorative lighting—a designer's approach. *Trans. Illum. Engng. Soc. Lond.*, 1956, 21, 117-133.—This report deals broadly with the aesthetics of illumination. In reviewing the "trend of design," reference is made to factors of color, form, light and shade, contrast, and novelty. Consideration is also given to the factors which influence changes in fashion, taste and technique.—R. W. Burnham.

5804. Farnsworth, Paul R. Year of birth and musical eminence: a note. *J. Aesthet.*, 1956, 15, 253-254.—Further data on musical eminence aid in validating the principle that "mathematically speaking, the curve which relates musical eminence with birthdate appears to be negatively accelerated."—P. R. Farnsworth.

5805. Gastaud, Henri. La maladie de Vincent Van Gogh envisagée à la lumière des conceptions nouvelles sur l'épilepsie psychomotrice. (Van Gogh's illness as seen in the light of new concepts on psychomotor epilepsy.) *Ann. Méd.-Psychol.*, 1956, 1, 196-238.—In an attempt to reconcile the many speculations about Van Gogh's emotional disorders, the author proposes a new hypothesis: that of a focal lesion of the temporal lobe and the rhinencephalon. In the artist's life can be found abundant material revealing (1) some psychomotor episodes, including somnambulism, violent hallucinations followed by amnesia; (2) states of confusion; (3) evidence of character disorders, such as generally found in psychomotor epileptics, between attacks and even during his quietest periods. Many factors could point to a birth injury. 35 references.—M. D. Stein.

5806. Gordon, Donald A. (4408 First Pl., N. E., Washington, D. C.) Individual differences in the evaluation of art and the nature of art standards. *J. educ. Res.*, 1956, 50, 17-30.—Absolute, subjective, and relativistic theories of art standards are differentiated. On this basis a factor analysis of the ratings of paintings by a group of experts was made, from which 3 factors emerged: approval or disapproval of modern art, interest in technique and craftsmanship, and interest in style and originality. The findings are interpreted as supporting the relativistic theory.—M. Murphy.

5807. Lolli, Giorgio. (Yale U., New Haven, Conn.) Alcoholism and homosexuality in Tennessee Williams' "Cat on a Hot Tin Roof." *Quart. J. Stud. Alcohol*, 1956, 17, 543-553.—One of the fundamental motives of art is the individual's confusion between mental and physical realms. In the

process of the artist's communication of this confusion he strips it of the overwhelming anxieties linked to it. In the "Cat" the most archaic protests of the unconscious express themselves freely in a world of fantasy, with irrationality compatible with rationality. The urges underlying alcoholism and homosexuality, representing upheavals stirred by the pleasure principle against the reality principle, are purified of passion.—*W. L. Wilkins.*

5808. Munro, Thomas. (*Western Reserve U., Cleveland, O.*) **Suggestion and symbolism in the arts.** *J. Aesthet.*, 1956, 15, 152-180.—A detailed description of the ways in which mimetic suggestion and suggestion via contiguity in experience and via arbitrary symbolism function in the several arts.—*P. R. Farnsworth.*

5809. Phillips, William. (Ed.) **Art and psychoanalysis.** New York: Criterion Books, 1957. xxiv, 552 p. \$8.50.—A selection of 26 previously published papers from periodicals and books relating psychoanalytic theory to artistic production. Virtually all deal with literature, and they fall into 3 general categories: studies of single works of art or creative artists, theoretical essays, and literary pieces. Half of the contributions were written by psychoanalysts, and most of the remaining half by critics of literature. An essay by the editor on "Art and neurosis" opens the book.—*E. W. Eng.*

5810. Schoen, Max. **The intellectual temper of contemporary art.** *J. Aesthet.*, 1956, 15, 139-151.—The developments of science and art run in parallel fashion. Just as science in the intellectual sphere has gone from objectivism first to a mild subjectivism and then to a radical subjectivism so art in the area of feeling has moved from classicism to old Romanticism to a freer Romanticism.—*P. R. Farnsworth.*

(See also abstract 6196)

DEVELOPMENTAL PSYCHOLOGY

CHILDHOOD & ADOLESCENCE

5811. Alawi, A. H. (*U. Peshawar, Pakistan.*) **Nouzauden ki sirat ka mutalia.** (The study of the behavior of infants.) *Nur-ut-Talim*, 1956, 6(12), 25-30.—The methods and needs for the study of behavior of infants are described. The early research by behaviorists and their general conclusions are included for the benefit of Pakistani teachers.—*A. H. Alawi.*

5812. Brody, Sylvia. **Patterns of mothering: maternal influence during infancy.** New York: International Universities Press, 1956. 446 p. \$7.50.—In an intensive study of 32 infant-mother relationships, the author provides detailed observations on four age levels (4, 12, 20 and 28 weeks) of nursing or feeding behavior. The hypothesis of the study is that "in the mother-infant interaction feeding takes a central position." Following an extensive critical survey of the literature about infant and maternal behavior (Part I) is a second describing the experimental design and the observations themselves, together with the general material relative to the subjects. The third section deals with the implications of these findings in the development of the infant-mother relationship. 13-page bibliography.—*L. S. Baker.*

5813. Brooks, Joyce A. M., & Vernon, Philip E. (*U. London, Eng.*) **A study of children's interests and comprehension at a science museum.** *Brit. J. Psychol.*, 1956, 47, 175-182.—Reports a study of the numbers and types of children who visit a Children's Gallery in a Science Museum, their behavior and of the extent of their comprehension. "Methods of investigation included a sampling survey of attendances at different times of day and periods of the year, stopwatch recording of times spent at different exhibits and charts of movements, and an oral questionnaire dealing with the background of one hundred children and their understanding of selected exhibits."—*L. E. Thune.*

5814. Brotman, Richard Emmanuel. **An analysis of psychodynamic processes of change in small group behavior in a teen-age gang.** *Dissertation Abstr.*, 1956, 16, 1500.—Abstract.

5815. Brown, Daniel G. (*3275th USAF Hospital, Parks Air Force Base, Calif.*) **Sex-role preference in young children.** *Psychol. Monogr.*, 1956, 70(14) (No. 421), 19 p.—A group of 78 male and 68 female middle-class children ranging in age from 5-4 to 6-4, were administered the It Scale for Children (ITSC). The test-retest reliability of this instrument was .69 for boys and .82 for girls. The investigator found "large and significant differences" between boys and girls, "suggesting the existence of definite, relatively dichotomous sex-role patterns in young children." The author found "Evidence for the assumption of greater prestige and value in the male compared to the female role in young children. . . ." Economic class differences did not seem to affect the preferences. Boys with only female sibs appeared somewhat more feminine than those with only male sibs or those with both male and female sibs. The implications of these and other findings are discussed. 28 references.—*M. A. Seidenfeld.*

5816. Brownfield, Edith Dorothy. **An investigation of the activity and sensory responses of healthy newborn infants.** *Dissertation Abstr.*, 1956, 16, 1288-1289.—Abstract.

5817. Bühler, Charlotte. **Aufgaben und Methoden der Kinderpsychologie.** (Tasks and methods of child psychology.) *Psychol. Rdsch.*, 1956, 7, 79-84.—The roots of present child psychology can be traced to behaviorism and psychoanalysis. Its main task to-day is the description and the understanding of children's behavior as the result of maturation and motivation in connection with the structure of personality. The main methods are systematic study of behavior, experiments, tests with emphasis on projective tests and clinical observations.—*W. J. Kopitz.*

5818. Burchinal, Lee Garwood. **The relation of parental acceptance to adjustment of children.** *Dissertation Abstr.*, 1956, 16, 1528-1529.—Abstract.

5819. Butler, Alfred. (*Training School, Vineland, N. J.*) **The relationship of cephalo-pelvic disproportionate dystocia to intellectual development of the child.** *Train. Sch. Bull.*, 1956, 53, 83-96.—Of 9330 full term births, 492 were of cephalo-pelvic disproportion; of these 52 were exceptionally difficult and 20 were finally located for testing with WISC, Bender-Gestalt, and Heath Rail-walking tests. No appreciable loss of intellectual function nor high

frequency of mental retardation was found. 17 references.—*W. L. Wilkins.*

5820. Coleman, Lester L. Children need preparation for tonsillectomy. *Nurs. World*, 1956, 130, 8-9, 26.—This article shows how improper and unplanned approaches to childhood surgery can cause emotional trauma of a lasting nature.—(Courtesy of *Rehab. Lit.*)

5821. Creak, Mildred, & Singleton, S. G. The personality characteristics of parents of promising children. *Eugen. Rev.*, 1956, 48, 79-86.—Qualities linked with promise go beyond success in being selected for grammar school and include happiness, stability and intelligence. Parents, who give their children a long enough period of secure nurture and who enjoy doing this, contribute more than those who stress scholastic aptitude above all else. A number of commentaries follow this article.—*G. C. Schwesinger.*

5822. Davis, Junius Ayers. Returns sought from adult work by early adolescents, in relation to sociometric status among peers. *Dissertation Abstr.*, 1956, 16, 1232.—Abstract.

5823. Fisher, Vernon E. Predicting the behavior of children in a competitive situation. *Dissertation Abstr.*, 1956, 16, 1490.—Abstract.

5824. Fogel, Aliza. Shikum y'ladim korb'not hamilham. (Rehabilitation of children, victims of the war.) *Ofakim*, 1956, 10, 39-53.—Rehabilitation of European children (except in Germany) after the II World War is described on the background of statistical data: Physical and educational rehabilitation; children of D.P. persons; war orphans; mental rehabilitation. Special attention is paid to the psychological dangers of war, to psychological welfare and rehabilitation. A special paragraph is devoted to the educational and psychological difficulties of rehabilitation of 40,000 Jewish children, who came into Israel from Europe, especially children of ghettos, partisans and concentration camps. The rehabilitation activities in Israel were more successful than abroad.—*H. Ormian.*

5825. Frisher, Elisha. Itsuv hanofesh shel hayeled ham'honan. (Organizing the leisure time of gifted children.) *Ofakim*, 1956, 10, 31-38.—"Only a little attention is paid to gifted children, although they are, actually, difficult children from many points of view." The problem of proper recreation for this kind of children is more difficult than that of normal ones. The psychological background of this problem was searched in a primary school in Jerusalem (253 children, 55 of them gifted). A random sample of 10 gifted children and their parents were interviewed, in order to search: (1) Children's activities in their free time; (2) parents' interest in their recreation; (3) directing leisure time activities. Psychological results are given as well as educational suggestions, how to organize leisure time activities of gifted children.—*H. Ormian.*

5826. Garrison, Karl C. (*U. Ga., Athens.*) *Psychology of adolescence*. (Fifth ed.) Englewood Cliffs, N. J.: Prentice Hall, 1956. x, 529 p. \$6.00.—In addition to bringing this edition up to date by the inclusion of more recent research studies, (see 25: 7338), the author has reorganized the sections in an attempt to provide a better sequential study of the

varied aspects of adolescence. Special attention has been particularly given to the self-concept in adolescence. The text is divided into sections covering growth and development in adolescence, personality and adjustment in adolescence, social forces affecting the adolescent, and the end of adolescence. There is an appendix which includes a selected bibliography, motion pictures which relate to the adolescent age, and annotated bibliography of popular literature touching upon adolescence.—*J. J. Gallagher.*

5827. Harris, Stanley W. The expressed interests of two hundred Jewish teen-agers. *J. Jewish communal Serv.*, 1956, 32, 406-415.—A summary of a survey study on the activity preferences of 200 Jewish adolescents who in turn constituted a 10% random sample of over 2,000 Jewish boys and girls, members of the B'nai B'rith Youth Organization residing in eight midwestern states. Nine interest categories were encompassed and a comparison of activity preferences by age and sex was made. 46 references.—*M. A. Seidenfeld.*

5828. Hartley, Ruth E., & Goldenson, Robert M. *The complete book of children's play*. New York: Thomas Y. Crowell, 1957. xiv, 462 p. \$5.00.—The first 11 chapters are devoted to a discussion of the play needs and interests of children by age groups. The remaining 7 chapters discuss specific topics such as "they all want pets," and "finding room for play." The appendix contains various source lists.—*H. D. Arbitman.*

5829. Herford, M. E. M. *Youth at work; a five-year study by an appointed factory doctor*. London: Max Parrish, 1957. xvi, 154 p. \$3.00.—The volume's 7 chapters describe an English physician's medical experiences in Buckinghamshire where he was responsible for the professional supervision of youths leaving school and entering industry. Chapter 3 discusses the types of health problems encountered, including the mentally handicapped, the maladjusted, and others. Ch. 7 concludes with recommendations for the continuation and extension of this service to the youth of Great Britain. 3-page reference list.—*L. A. Pennington.*

5830. Hugo, Francis Goodale. *Conforming behavior in two groups of adolescent children and its relation to certain parental attitudes and personality characteristics*. *Dissertation Abstr.*, 1956, 16, 1731.—Abstract.

5831. Jackson, Philip W. (*U. Chicago, Ill.*) *Verbal solutions to parent-child problems*. *Child Developm.*, 1956, 27, 339-349.—"A content analysis technique was used to classify the written responses of 167 college students and 105 parents of these students to 11 hypothetical parent-child situations. . . Differences in the responses of fathers and mothers were found to be at variance with the popular stereotypes of a punitive male and a permissive female. Tentative explanations of these differences were offered within the framework of role conflict theory."—*L. S. Baker.*

5832. Knobloch, Hilda. *Neuropsychiatric sequelae of prematurity; a longitudinal study*. *J. Amer. med. Ass.*, 1956, 161, 581-585.—The present report presents an anteroprospective study of 992 infants, premature and full-term controls, and covers an evaluation of the neurological status and intellectual

potential of the infants at 40 weeks of age. A Gesell developmental examination and a physical examination were given. Findings indicated that the incidence of abnormality increased as the birth weight of the infant decreased, so that 50.9% of the infants with birth weight less than 1,501 gm. had defects ranging from minor neurological damage to severe intellectual deficiency. Some also had major visual handicaps.—(Courtesy of *Rehab. Lit.*)

5833. Koch, Helen L. (U. Chicago, Ill.) **Children's work attitudes and sibling characteristics.** *Child Develpm.*, 1956, 27, 289-310.—Work habits and attitudes of 384 children aged 5 and 6 are studied in relation to ordinal position of the child, his sex, and age difference from sibling, in 2-child families. Using teacher ratings and ten rating scales, differences in certain personality traits were discovered. Discussion is directed at unearthing some of the possible causes which might theoretically underlie these differences. 20 references.—L. S. Baker.

5834. Langeveld, M. J. **Die Bedeutung des eigenen Körpers für das Selbsterlebnis des Kindes.** (The significance of one's own body for the child's experience of the self.) *Psychol. Rdsch.*, 1954, 5, 206-220.—The various phases of experience of the self starting with the infant are discussed. This experience expresses itself in different movements, e.g., in movements of the hand. The concept of the self is also determined by the condition of the body so that a defect influences the experience of the self. In the concept of the self is also mirrored the attitudes of others towards the child.—M. J. Stanford.

5835. Leuba, Clarence. "Vile" barn. ("Wild" children.) *Norsk ped. Tidsskr.*, 1956, 40, 67-75.

5836. Levin, Gideon. **Al hapahad etsel y'ladim bney 5-8.** (About fears of children age 5 to 8.) *Ofakim*, 1956, 10, 261-265.—In 1953, a survey was carried out in all kindergartens of the "Kibuts artsi" in order to search by simple observation manifest emotions of children. 5.6% suffered from permanent fears, and 94.4% from transitory fears only. During the year 1954, a sample of 60 children out of those children was chosen, in order to search "latent fears" by means of systematic observation and recording carried out by kindergartners. 300 drawings of these children were gathered, and dreams and stories were recorded. 21% of the sample group suffered from overt fears, but in all children latent fears were revealed by means of their stories, dreams, drawings etc.—H. Ormian.

5837. Levin, Harry, & Sears, Robert R. **Identification with parents as a determinant of doll play aggression.** *Child Develpm.*, 1956, 27, 135-153.—The hypothesis that fantasy aggression of 5-year-old children is partly a "function of the children's identification with aggressive role models" is tested and upheld for boys and girls, highest frequency of aggression in each sex being related to the higher aggressiveness of the same-sex parent. Boys were found to be more aggressive than girls, and "only" boys more than other boys. Socio-economic status was not found to contribute to differences in amounts of aggression.—L. S. Baker.

5838. McCandless, Boyd R., & Castenada, Alfred. **Anxiety in children, school achievement,**

and intelligence. *Child Develpm.*, 1956, 27, 379-382.—School achievement and the anxiety and I. scores from the children's form of the manifest anxiety scale were found to be related. In sixth grade girls, the anxiety score was also found related to intelligence. The anxiety score made a small additional contribution to the successful prediction of academic achievement.—L. S. Baker.

5839. McFarlane, Jean W. **Fra spebarn til vaksen.** (From infancy to adulthood.) *Norsk ped. Tidsskr.*, 1956, 40, 175-182.

5840. Mathey, Franz Josef. **Längsschnittergebnisse zur Frage der seelischen Entwicklung des Grundschulkindes.** (Results of longitudinal studies concerning the psychological development of the elementary school child.) *Psychol. Rdsch.*, 1956, 7, 163-176.—A part of the results of a longitudinal study of the physical, psychological and sociological development of 400 boys and 400 girls from first grade through 4th grade are reported. Dimensions such as drive, mood, susceptibility to stimulation, adaptability, restraint, differentiation and steadiness are arranged in an individual development profile. The diversity of these profiles suggests that besides the periodical changes of the ontogeny still other developmental laws must be active at the same time.—W. J. Koppitz.

5841. Moustakas, Clark E., Sigel, Irving E., & Schalock, Henry D. **An objective method for the measurement and analysis of child-adult interaction.** *Child Develpm.*, 1956, 27, 109-134.—A schedule is presented for observation of adult-child interaction, with a total of 89 adult and 82 child categories, as well as anxiety hostility ratings. The schedule has been tested and found reliable in studying parent-child interaction in home and laboratory (playroom) and in studying therapist-child interaction.—L. S. Baker.

5842. Nordland, Eva. **Begrepsutvikling i førskolealderen.** (Concept formation in the pre-school age group.) *Norsk ped. Tidsskr.*, 1955, 39, 312-329.

5843. O'Connor, N. **The evidence for the permanently disturbing effects of mother child separation.** *Acta psychol.*, 1956, 12, 174-191.—A survey of research tends to undermine confidence in the hypothesis of maternal deprivation and resulting social, intellectual and physical inadequacy, in part due to the ambiguity of the hypothesis itself as to whether the results of deprivation are due to some unstated lack of mothering or to the unstimulating nature of institution environment. Contradictory research results point to the need for a psychology of parenthood since there is some danger that the later misdeeds of children and other psychological ills will be attributed to bad parents. 63 references.—G. Rubin-Rabson.

5844. Pikunas, Justin. (U. Detroit, Mich.) **Fundamental child psychology.** Milwaukee, Wisc.: Bruce, 1957. xviii, 259 p. \$3.50.—Written primarily as a text for prospective teachers and as a guidebook for parents, this book is divided into 4 sections: Basic approach to child study; phases of development; basic aspects and dimensions of the child's personality; and personality, the self, and child guidance. Each chapter is followed by "Questions for Discussion" and "Selected Readings." An appendix contains a sample

case study. A glossary, bibliography of books, articles and journals and a list of audio-visual aids are included.—*H. D. Arbitman.*

5845. Remmers, H. H., & Radler, D. H. *The American teenager.* Indianapolis: Bobbs-Merrill, 1957. 267 p. \$3.75.—A report of the plans, problems, fears, prejudices, beliefs and disbeliefs of teenagers based upon what they themselves say. The authors explain their methods, describe the young people they interviewed, and report the opinions expressed. These show some disagreement with standards, and an ability to draw conclusions which are to considerable extent the attitudes of their elders, especially with older teenagers.—*M. M. Gillet.*

5846. Rush, Bernard Hollander. *An investigation of parent-child relationships, in broken homes and their relationship to school behavior.* *Dissertation Abstr.*, 1956, 16, 1509.—Abstract.

5847. Sánchez-Hidalgo, Efraín. *La psicología de la crianza. VIII: La necesidad de disciplina.* (The psychology of rearing. VIII: The need for discipline.) *Rev. Asoc. Maestros, P.R.*, 1956, 15(3), 86-87; 102.—The process of development requires discipline. Excessive freedom may result in serious problems. Freedom should be granted progressively as the child grows in experience. A distinction is made between heteronomous discipline and autonomous discipline, as formulated by Piaget. The importance of arbitrary discipline in the first years is stressed, as a necessary step toward discipline from within.—*E. Sánchez-Hidalgo.*

5848. Sandels, Stina. *Utvecklingspsykologiska beteendestudier hos barn i åldern 1½-8½ ar.* (Developmental-psychological studies of behavior of children, age 1½-8½.) Uppsala: Appelbergs Boktryckeri, 1956. 271 p.—"The work deals with the development of fundamental quantity behaviors—ordering, dividing-distribution and assembling in receptacles—during the period from 1½ up to and including 8½ years. . . . Attempts have been made to fit behaviors observed by the author in the psychological hierarchy from perceptive behaviors to higher thought processes." English summary.—*L. S. Baker.*

5849. Sewell, William H., & Haller, Archie O. *Social status and the personality adjustment of the child.* *Sociometry*, 1956, 19, 114-125.—The hypothesis was tested ". . . that in a culturally homogeneous social system there is no significant correlation between the social status of the child's family and his measured personality adjustment when their mutual relationship to selected variables is controlled. . . . Zero-order correlations between the two status measures and measured personality adjustment were found to be low [$r = +.16$ and $+.23$] but positive and significant." The relationship is still significant when the effect of size of family, intelligence and age are controlled. The degree of the relationship may have been reduced by the crudeness of the available instruments and the homogeneity and simplicity of the community. 74-item bibliography.—*H. P. Shelley.*

5850. Shapiro, David Sidney. *Perceptions of significant family and environmental relationships in aggressive and withdrawn children.* *Dissertation Abstr.*, 1956, 16, 1285-1286.—Abstract.

5851. Shepard, Winifred O. *The effect of verbal training on initial generalization tendencies.* *Child*

Develpm., 1956, 27, 311-316.—Children tested for "their tendency to generalize a . . . response" were found to have increased generalization following verbal training regarding the task. The principle of mediated generalization was inferred as the basis.—*L. S. Baker.*

5852. Shneerson, F. *Hezyonot hay'sod b'hayey hanefesh shel y'ladim.* (Basic phenomena in children's mental life.) (2nd ed.) Tel Aviv: Massada Ltd. [1956]. 156 p.—A concept of "personal neurosis" is broadly discussed in the new edition; considerations are given about "the common features of the trends in psychology and psychotherapy." Author's approach is named "intimate psychology," and its position in the whole psychology is broadly discussed.—*H. Ormian.*

5853. Siegel, Alberta Engvall. *Film-mediated fantasy aggression and strength of aggressive drive.* *Child Develpm.*, 1956, 27, 365-378.—"The behavior theory hypothesis of equivalence of forms was tested as it applies to the effects of film-mediated fantasy aggression on strength of aggressive drive in young children." Using a highly aggressive cartoon film and a "matched" nonaggressive film, the children's play following the screening was scored for aggression and for overt signs of guilt and anxiety. The scores were similar for the two films. Sex differences and session differences were found. 31 references.—*L. S. Baker.*

5854. Skard, Ase Gruda. *Nye drag i barnepsykologisk gransking i Amerika.* (New research trends in American child psychology.) *Norsk ped. Tidsskr.*, 1955, 39, 1-21.

5855. Skard, Aase Gruda. (U. Oslo, Norway.) *Recent trends in child psychology in U.S.A.* *Courier*, 1955, 5, 341-349.—"The most striking impression that research in child development in America gives today is one of great differences and divergencies in problems and methods." Researches relating "to growth theories, learning theories, psychoanalytical or other clinical systems, and theories derived from anthropological and sociological work" are briefly viewed.—*L. S. Baker.*

5856. Spitz, René A. *Die Entstehung der ersten Objektbeziehungen.* (The genesis of the first object relations.) Stuttgart, Germany: Ernst Klett, 1957. 110 p. DM 12.80.—A psychoanalytically oriented study of developing object relations during the first year of life. Direct observations of behavior were made, along with use of the Bühler-Hetzer Baby Tests, and film analysis. Key points during the first year were found to be: the period of helplessness following birth, the establishment of the "first organizer" in the third month, and the "second organizer" about the eighth month. "Organizer," a term from embryology, refers to emergent dominating centers of integration. The first is the nascent ego as shown by interpersonal smiling, the second represents the establishment of the ego as well as the true "object," and is accompanied with "eighth month anxiety." Implications for infant care and psychotherapy are discussed.—*E. W. Eng.*

5857. Strang, Ruth. (Columbia U., New York.) *Gifted adolescents' views of growing up.* *Except. Child.*, 1956, 23, 10-15; 20.—A comparison was made

on the written response to the question, 'How it feels to be growing up' between 883 students with average IQ of 95 and 241 students with IQ 120 or greater in grades seven to twelve inclusive. The gifted children showed similar responses to the average group on feelings of dissatisfaction with changes in body growth, feelings of indecision over vocational choice and concern over scholastic success of grades. The gifted children showed different frequency of response; looking forward more to independence and self direction, having more concern for world peace and expressed more satisfaction in relations with their peers. Differences within the gifted group relating to age showed a waning interest in sports, less concern over family problems, greater concern over their social behavior and increasing interest in morality and religion.—*J. J. Gallagher.*

5858. Thomae, Hans. Untersuchungen über die Periodik im kindlichen Verhalten. IV. Deutung der Befunde. (Observations of periodicity in children's behavior. IV. Interpretation of findings.) *Z. exp. angewand. Psychol.*, 1955/56, 3, 375-601.—The observations of Erfmann, Lehr and Schapitz of periodic cycles in solitary, spontaneous play-situations are interpreted in connection with Thomae's theory of motives. An "expressive dynamic centre" is assumed which instigates the periodicity of behavior. It maintains the self-regulation of the organism and is probably determined by endogenous factors. A periodical phenomena can generally be attributed to exogenous factors. Practical consequences of the findings for education and therapy are discussed. 33 references.—*W. J. Koppitz.*

5859. Weinstein, Eugene A. Weights assigned by children to criteria of prestige. *Sociometry*, 1956, 19, 126-132.—The relative weights children assign to various criteria of occupational prestige were determined and the effect of status and grade level upon these weights assessed. It was found: (1) status level was negatively related to weights assigned income, fame and authority and positively for education and working conditions, (2) grade level was negatively related to the importance given to fame and positively related to the importance given to authority, and (3) "the interaction of the two variables was related to the weights assigned to scarcity. . . . These directional patterns were generally congruent with those found in adult ascription behavior."—*H. P. Shelley.*

5860. Wittenborn, J. R., et al. A study of adoptive children. I. Interviews as a source of scores for children and their homes. II. The predictive validity of the Yale Developmental Examination of Infant Behavior. III. Relationships between some aspects of development and some aspects of environment for adoptive children. *Psychol. Monogr.*, 1956, 70 (1, 2, 3), (Nos. 408, 409, 410), 1-115.—I describes the investigators' efforts to provide some measuring devices. II describes their efforts to find a useful degree of predictive significance for the infant examination; in this direction they were unsuccessful. III is concerned with the question of "What characteristics of adoptive homes (placements) may be shown to be correlated with characteristics of adoptive children." 48 references.—*M. A. Seidenfeld.*

5861. Young, Frederica Young. Fostering co-operative attitudes in children through an action

program. *Dissertation Abstr.*, 1956, 16, 1731-1732.—Abstract.

(See also abstracts 5253, 5638, 5670, 5732, 5913, 5926, 5987, 6026, 6063, 6068, 6075, 6156, 6209, 6331, 6366, 6384, 6386, 6392, 6443, 6550, 6557, 6561, 6647)

MATURITY & OLD AGE

5862. Bromley, Dennis B. (*U. Liverpool, Eng.*) Research prospects in the psychology of ageing. *J. ment. Sci.*, 1956, 102, 273-279.—Principal problem areas are personality, the physical basis of adult behavior, intelligence and achievement, and the influence of age on perceptual, learning, and response processes. Action research is important, both as realistic and as engaging more public support. 27 references.—*W. L. Wilkins.*

5863. Busse, Ewald W., Barnes, Robert H., Friedman, Edward L., & Kelly, Edward J. Psychological functioning of aged individuals with normal and abnormal electroencephalograms. *J. nerv. ment. Dis.*, 1956, 124, 135-141.—A study is reported of 223 functioning community volunteers, aged 60 years or over, and without significant biological or psychiatric illness involving the central nervous system. The percentages of normal, focal and diffuse cortical disturbances are presented and discussed. These data are then related to Wechsler Adult Intelligence Scale and Rorschach scores, which indicate no significant differences in psychological functioning for the various EEG groups. Implications and speculations concerning these results are discussed.—*N. H. Pronko.*

5864. Clay, Hilary M. A study of performance in relation to age at two printing works. *J. Geront.*, 1956, 11, 417-424.—Individual production records of skilled printers were analyzed for age differences. Included in the skills were those of machine-compositors, hand compositors, and readers. Data were gathered after the introduction of an incentive pay scheme 3 years earlier. "Declines of performance with age were small but were observed from about 50 years and upwards, except among older workers, who maintained their output at a higher level than younger men until retirement."—*J. E. Birren.*

5865. King, H. F. An attempt to use production data in the study of age and performance. *J. Geront.*, 1956, 11, 410-416.—A study was made of age differences in production by women using power sewing machines. The data were based upon four 8-week periods of observation during 1949 and 1953. "Peak of production was reached around the age of 30, and at ages above 35 a slow decline was observed. Poor performance was only one among several important reasons for leaving, but was of particular weight among teen-agers, and consequently exerted some influence on the general standard of higher age groups."—*J. E. Birren.*

5866. Murphey, Hermon K. Against compulsory retirement. *Personnel J.*, 1956, 35, 100-102.—Compulsory retirement at a given age regardless of the ability and willingness to work is considered discrimination and described as ethically wrong, so-

cially undesirable and economically unsound.—M. B. Mitchell.

5867. Phillips, Bernard S. A role theory approach to predicting adjustment of the aged in two communities. *Dissertation Abstr.*, 1956, 16, 1734.—Abstract.

5868. Shapiro, M. B., Post, F., Löfving, B., & Inglis, J. (Maudsley Hosp., London, Eng.) "Memory function" in psychiatric patients over sixty, some methodological and diagnostic implications. *J. ment. Sci.*, 1956, 102, 233-246.—For 102 patients, chiefly categorized as functional, organic, and doubtful, a battery of tests of memory function was unable to differentiate the groups, even so well as a simple perceptual task, such as the Bender-Gestalt. It is suggested that many of the clinical tests of memory commonly used by psychologists in testing the aged are of limited usefulness for the purpose.—W. L. Wilkins.

5869. Shrut, Samuel D. Old age and death attitudes: a comparative analysis and evaluation of responses by a group of ambulatory white female persons sixty-five years and older living under varying conditions of institutional supervision. *Dissertation Abstr.*, 1956, 16, 1509-1510.—Abstract.

5870. Stern, Erich. *Der Mensch in der zweiten Lebenshälfte; Psychologie des Alterns und des Alters.* (Man in life's second half; psychology of aging and old age.) Zürich: Rascher, 1955. 263 p. Sw. Fr. 17.50.—On the basis of extensive interviews and personal experiences the author surveys the aging process. He reviews pertinent statistics, notes the rise of older persons in the world population, describes the perception of aging in physiological and psychological process, and discusses the implications of experiencing the passage of time, changes in sexual activity, shifts in familial and social relationships, occupational pressures and economic needs. Also considered are the interaction between personality and attitudes toward death, the psychopathologies of aging, and preventive mental health measures. 107 references.—H. P. David.

5871. Thaler, Margaret. (Walter Reed Army Inst. Res., Washington, D. C.) Relationships among Wechsler, Weigl Rorschach, EEG findings, and abstract-concrete behavior in a group of normal aged subjects. *J. Geront.*, 1957, 11, 404-409.—A group of 116 individuals over the age of 60 were examined in a large variety of psychological and physical functions. The subjects were living in the community and were believed to be free of cerebral defect, senile, arterio-sclerotic, or functional psychoses. "Markedly concrete approaches to the sorting task were used by 66 per cent of this group. This was considered suggestive of limited capacity in this group to perform at an abstract level on the test used." Significant correlations were reported between age and many of the variables and also among the various test variables.—J. E. Birren.

5872. Thompson, Wayne Edwin. The impact of retirement. *Dissertation Abstr.*, 1956, 16, 1528.—Abstract.

(See also abstracts 5577, 5677, 5768, 6439, 6490)

SOCIAL PSYCHOLOGY

5873. Adorno, Th. W. (Wolfgang-Goethe U., Frankfurt am Main, Germany.) *Bemerkungen über Statik und Dynamik in der Gesellschaft.* (Reflections on statics and dynamics in society.) *Köl. Z. Soziol.*, 1956, 8, 321-328.—Since A. Comte many sociologists have distinguished static and dynamic laws in society. These statements have no scientific basis; they are either remnants of ideological thinking or due to an urge of classification. The laws of society cannot be simply founded on general human needs, for what a person needs or does not need depends on the cultural conditions of the society and its productive power. In conclusion it is stated that the ideas of statics and dynamics in society should be given up as useless.—M. Haas.

5874. Albert, Hans. (U. Köln, Germany.) *Entmythologisierung der Sozialwissenschaften; die Bedeutung der analytischen Philosophie für die soziale Erkenntnis.* (De-mythologizing the social sciences; the importance of analytic philosophy for sociological knowledge.) *Köl. Z. Soziol.*, 1956, 8, 243-271.—It is asserted that the task of freeing the social sciences from ideological and metaphysical contents as well as from pseudo-problems and erroneous statements can be achieved by applying logical analysis to them. The methodological consequences of this analysis will lead to the elimination of value judgments from sociology. Cleared of myths, a positivistic sociology based on scientific analysis will be able to become an "instrument of rational politics," which will "see through ideological masquerades." 105 references.—M. Haas.

5875. Asch, Solomon E. (Swarthmore Coll., Pa.) *Studies of independence and conformity: I. A minority of one against a unanimous majority.* *Psychol. Monogr.*, 1956, 70(9), (No. 416), 70 p.—Asch reports here the first of a series of studies on "some of the conditions responsible for independence and lack of independence in the face of arbitrary group pressure." (1) While the minority member of the group tended to remain "preponderantly accurate," it was found that "the contradictions by the majority deflected considerably the estimates of the minority in its direction." (2) There were considerable variances in the ability of individuals to resist the arbitrary judgments of the majority. (3) The greatest errors found in the minority judgments occurred when public announcement of the decision was required, and diminished in the extent of error when the need for announcing it publicly was removed. (4) "The action of the majority controlled the level and quality of errors." (5) The individuals who represented the minority "showed a marked tendency to be consistently independent, yielding, or intermediate in coping with the pressure of the majority."—M. A. Seidenfeld.

5876. Barber, Bernard. (Columbia U., New York.) *Social stratification; a comparative analysis of structure and process.* New York: Harcourt, Brace, 1957. xix, 540 p. \$6.50.—A comprehensive examination of the growing body of knowledge on social stratification and a systematic attempt to relate that knowledge to a general sociological theory. Presents a comparative analysis of empirical evidence

from numerous studies of past and present societies, Western and non-Western.—*R. M. Frumkin.*

5877. Becker, Howard. (Ed.) *Societies around the world; a new shorter edition: Eskimo, Navaho, Baganda, Chinese, peasant, cotton South, English Midlands.* New York: Dryden Press, 1956. xx, 811 p.—This abridgment of the 2-volume work by Irwin T. Sanders, Richard B. Woodbury, Frank J. Essene, Thomas P. Field, Joseph R. Schwendeman, and Charles E. Snow (see 28: 2442) compresses the selections of reprinted material and especially written articles. A very few selections are omitted. Integrating and connecting paragraphs are in some cases abridged, in others augmented. There is increased emphasis on values and value systems and secularization is discussed at more length.—*C. H. Sprow.*

5878. Bierstedt, Robert. *The social order; an introduction to sociology.* New York: McGraw-Hill, 1957. viii, 577 p. \$6.00.—This is another introductory text in sociology. Using a sociological approach the author concerns himself particularly with the structure of society and its changes. The 16 chapters cover the basic sociological principles under 6 major headings, including: I. Introduction; II. The Natural Conditions of Human Society; III. Culture; IV. Social Organization; V. Social Differentiation; VI. Social Change. 20 pages of selected readings by chapters are included.—*H. Angelino.*

5879. Burdick, Harry Alden. *The relationship of attraction, need achievement, and certainty to conformity under conditions of a simulated group atmosphere.* *Dissertation Abstr.*, 1956, 16, 1518-1519.—Abstract.

5880. Clark, Burton R. *Organizational adaptation and precarious values: a case study.* *Amer. sociol. Rev.*, 1956, 21, 327-336.—(See *Sociol. Abstr.*, 1957, 5, abs. 3349.)

5881. Davidson, Donald; Suppes, Patrick, & Siegel, Sidney. *Decision making; an experimental approach.* Stanford, Calif.: Stanford University Press, 1957. 121 p. \$3.25.—A behavioristic solution to the problem of independently measuring subjective probability and utility based upon a simple one-person game is proposed. Several models are discussed, hypotheses are deduced and experimentally tested, and the predictive power of the models is compared. 26 references.—*J. Arbib.*

5882. Forde, Daryll. (*University Coll., London, Eng.*) *Anthropologie und Soziologie.* (Anthropology and sociology.) *Köl. Z. Soziol.*, 1956, 8, 172-185.—An outline of the development of modern anthropology in its various aspects is given in order to explain the present relationship between anthropology and sociology.—*M. Haas.*

5883. Fosen, Robert Harlan. *Social solidarity and differential adoption of a recommended agricultural practice.* *Dissertation Abstr.*, 1956, 16, 1522-1523.—Abstract.

5884. Ginsberg, Morris. *Essays in sociology and social philosophy, Vol. 1. On the diversity of morals.* New York: Macmillan, 1957. xiv, 329 p. \$4.00.—Part one of this book discusses moral bewilderment, the moral basis of political conflicts, ethical relativity and political theory, Durkheim's

ethical theory, psychoanalysis and ethics, the nature of responsibility, diversity of morals, basic needs and moral ideals. Part two includes chapters on the individual and society, history and sociology, the concept of evolution and sociology, a note on the conception of stages in social evolution, Comte, Durkheim's theory of religion, national character and national sentiments, the place of sociology, the claims of eugenics, and an introduction to the study of social institutions.—*G. K. Morlan.*

5885. Glick, Paul C., & Miller, Herman P. *Educational level and potential income.* *Amer. sociol. Rev.*, 1956, 21, 307-312.—(See *Sociol. Abstr.*, 1957, 5, abs. 3255.)

5886. Hallowell, A. Irving. (*U. Pennsylvania, Philadelphia.*) *The structural and functional dimensions of a human existence.* *Quart. Rev. Biol.*, 1956, 31, 88-101.—After reviewing attempts to systematically define "Man" and a discussion of the inconsistencies and difficulties of such attempts, the writer suggests that "a human level of existence needs definition in more than structural terms, and the behavioral levels of adaptation observed in living primates are as legitimate a basis for reconstructing behavioral evolution as are deductions from comparative anatomy." The term "protoculture" is suggested to characterize the initial stages of cultural development; protocultural characteristics would include "learned behavior, biparental families, structured social groups, some form of communication, tool-using if not tool-making." 60-item bibliography.—*L. I. O'Kelly.*

5887. Haythorn, William; Couch, Arthur; Haefner, Donald; Langham, Peter, & Carter, Launor F. *The behavior of authoritarian and equalitarian personalities in groups.* *Hum. Relat.*, 1956, 9, 57-74.—Groups composed of all high F-scale score people or low scorers were given the task of recording a script for a movie scene dealing with a human relations problem. Rated behavioral traits, recorded behavioral acts and responses to a post-meeting reaction sheet were analyzed. As predicted by the authors, significant differences were found between high F-score and low F-score groups, in the direction of a more democratic orientation in the latter groups. Distinctive differences in the characteristics of leaders who emerged in the two groups were also noted.—*R. A. Littman.*

5888. Hofstätter, Peter R. (*Hochschule für Sozialwissenschaften, Wilhelmshaven, Germany.*) *Gruppendynamik: Kritik der Massenpsychologie.* (Group dynamics: a critique of mass psychology.) Hamburg, Germany: Rowohlt, 1957. xii, 194 p.—An introduction into quantitative methods in psychology is given. Groups are defined as having functions and structure and are thus to be distinguished from masses. The dynamics of groups of all sizes (including groups of groups, e.g., nations) are developed. Pertinent historical and philosophical outlooks add to the book's very wide scope. They are interwoven with the author's digest of the world's literature on experiments with groups.—*M. Kaelbling.*

5889. Holder, Wayne Butler. *The relationship of conformity and consistency of value attitudes to personal and social adjustment.* *Dissertation Abstr.*, 1956, 16, 1277-1278.—Abstract.

5890. Iklé, Fred C., & Kincaid, Harry V. **Social aspects of wartime evacuation of American cities with particular emphasis on long-term housing and reemployment.** *Nat. Acad. Sci.—Nat. Res. Coun. Publ.*, 1956, No. 393, (Disast. Stud. No. 4), xii, 100 p.—This report is concerned with problems which arise from the semi-permanent removal of large numbers of urban dwellers to safer areas as opposed to their temporary dispersal for the duration of a sudden attack. It is concerned with the feasibility of evacuation, the cost in time and resources of instituting a large-scale evacuation policy, the social and economic repercussions of long-range evacuation, the possible resulting dislocations in other spheres of national life, and a clarification of terminology and conceptualization.

5891. Israel, Joachim. **Self evaluation and rejection in groups: three experimental studies and a conceptual outline.** Stockholm, Sweden: Almqvist & Wiksell, 1956, 249 p.—The research reported here is in the tradition of Lewin and, especially, Festinger and his coworkers. Chapter I is an extensive review of the literature on social influence processes; chapter II reports a study on the "Rejection of deviants under threat"; chapter III presents a theory of the processes involved in semi-formal terms; chapter IV reports an investigation on the "Differential rejection of superior and inferior individuals in a group"; and chapter V reports a third investigation of "Self-evaluation and evaluation of oneself by others." 123-item bibliography.—R. A. Littman.

5892. Jacobsen, Walter. **Beitrag der Psychologie zu Bemühungen um politische Bildung.** (Contribution of psychology towards efforts to political education.) *Psychol. Rdsch.*, 1956, 7, 224-230.—The results of educational psychology and psychology of advertizing are used for a program of political education. The first step is the communication of the elementary political knowledge, the second the anchoring of a democratic attitude. 5 general methods to achieve this goal are mentioned: the direct rational approach, the indirect approach by means of games, group-activities, the emotional experience, e.g., celebrations of becoming of voting age etc., habit forming, and activation of the individual citizen.—W. J. Koppitz.

5893. Keedy, T. C., Jr. (U. Southern California, Los Angeles.) **Factors in the cohesiveness of small groups.** *Social. soc. Res.*, 1956, 40, 329-332.—The cohesiveness of small groups was not found to be structural along the lines of agreement with goals of the group, feeling and thinking together, and was found to be associated with a number of other factors including long term acquaintanceship prior to group membership. Motives include friendship, personal satisfaction, fulfillment of personal needs, contentment, and other personal-centric factors.—S. M. Amatora.

5894. Klineberg, Otto. (Columbia U., New York.) **The place of psychology in UNESCO's social science program.** *Trans. N. Y. Acad. Sci.*, 1956, 18, 456-461.—The program of the Division of Applied Social Sciences of UNESCO during 1953-55 is described. The 4 major areas of concern were: (1) "the problem of international understanding and misunderstanding," (2) human rights and the problem of race, (3) the "Social Implications of Tech-

nological Change," and (4) the evaluation and improvement of "action programs."—P. Swartz.

5895. Lanzetta, John T., & Roby, Thornton B. **Group performance as a function of work-distribution patterns and task load.** *Sociometry*, 1956, 19, 95-104.—". . . the relationship between two methods of work distribution [in three main groups] and group performance was studied under two task load conditions." Group structures used were: (1) assignment to individuals of homogeneous functional categories of tasks and (2) assignment to individuals of sub-tasks. The task was the simulated operation of an Air Defense Command Aircraft Control and Warning Center. "The failure of [group] structure and structure X interaction to reach significance casts some doubt on the validity of assumptions concerning the importance of structure variables." The reasons for failure to find the predicted relationships are discussed along with the interpretation of an interaction between task load and session.—H. P. Shelley.

5896. Lawlor, M. M. **Hereditary determinants of social dominance in the golden hamster.** *Brit. J. Anim. Behav.*, 1956, 4, 75-76.—Abstract.

5897. Lawner, Rhoda Lydia. **Social conflict as a subject of investigation in American research from 1919 to 1953.** *Dissertation Abstr.*, 1956, 16, 1520.—Abstract.

5898. Louis, V. **Adlerian point of view on health insurance.** *Amer. J. indiv. Psychol.*, 1956, 12, 59-62.—"The existence of institutions for insurance is the result of the need for security. . . . However, if the personal feeling of insecurity is based upon an erroneous goal, the possibilities for insurance offered prove in each case to be insufficient."—A. R. Howard.

5899. McAllister, Joseph B. (Catholic U., Washington, D. C.) **Psychoanalysis and morality.** *New Scholast.*, 1956, 30, 310-329.—Examination of some doctrines imputed to Freud and his followers indicates that they can be antagonistic to moral truth, and some of these dangers are discussed. However, it is concluded that, as the therapist's religious, philosophical, ethical and moral conceptions are involved in analysis along with his professional competence, the real problem is to find practitioners who can benefit their patients by analysis without endangering their moral and religious convictions.—G. S. Speer.

5900. Mair, L. P. **Applied anthropology and development policies.** *Brit. J. Sociol.*, 1956, 7, 120-133.—Though moral judgments are usually traceable to primary experiences of value they do rest on assumptions about facts and it is for the social scientist to inquire into the validity of these assumptions. To establish a rationally based moral system of general validity there is need for more inquiry into human needs and the laws of social interaction. Here the knowledge of the anthropologist should prove useful.—R. M. Frumkin.

5901. Merrill, Francis E., & Eldredge, H. Wentworth. (Dartmouth Coll., Hanover, N. H.) **Society and culture: an introduction to sociology.** Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1957. xiii, 592 p. \$6.75.—This first revision (see 27: 328) involves a changed unifying theme in which all concepts derive from a concept of society. 5-chapter sections cover each basic concept. The essence of

society, social interaction, refers to "human beings in meaningful reciprocal activity." Much of the anthropological, historical, and social planning material has been omitted and the findings of recent empirical research studies added. Chapters are devoted to areas significantly newly developed such as: small groups, social stratification, social mobility, voluntary associations, and the urban community. Chapter bibliographies.—*R. Schaef.*

5902. Mühlmann, W. E. *Ethnologie als soziologische Theorie der interethnischen Systeme.* (Ethnology as sociological theory of the interethnic systems.) *Köl. Z. Soziol.*, 1956, 8, 186-203.—It can be asserted that ethnography as a science has progressed extensively and intensively; what is missing, however, is a unifying ethnological theory. The author wishes to introduce the basic concept of "ethnos" or "ethnie" into ethnography instead of the misleading term "people." Discussed are the following subjects: the subject of ethnology; ethnogenesis as explained in myth and romantic ideology, and as seen in reality; the integrating role of the great historic powers.—*M. Haas.*

5903. Roby, Thornton B., & Lanzetta, John T. *Work group structure, communication, and group performance.* *Sociometry*, 1956, 19, 105-113.—This paper introduces "... several constructs which appear to be of general utility in the measurement and analysis of communication in groups." The constructs are presented in a theoretical framework in which task performance and group structure are so conceptualized as to represent in matrix form functional relationships in the group. Reference is made to a series of experimental studies indicating (1) that certain communication structures are inherently more difficult than others and (2) the limiting factor in the performance of the groups studied is not the gross information capacity but rather "... the inability of groups to set up an efficient system for phasing or actuating messages." Several hypotheses stemming from the conceptualizing and the studies are discussed.—*H. P. Shelley.*

5904. Sargant, William. *Battle for the mind; a physiology of conversion and brain-washing.* Garden City, N. Y.: Doubleday & Co., 1957. 263 p. \$4.50.—The author examines the physiological mechanisms involved in the fixing or destroying of political and religious beliefs in the human brain. "This study discusses mechanistic methods influencing the brain which are open to many agencies, some obviously good and some obviously very evil indeed; but it is concerned with brain mechanics, not with the ethical and philosophical aspects of a problem ... its object is only to show how beliefs, whether good or bad, false or true, can be forcibly implanted in the human brain; and how people can be switched to arbitrary beliefs, altogether opposed to those previously held." 194-item bibliography.—*C. Tague.*

5905. Schein, Edgar H. *The Chinese indoctrination program for prisoners of war.* *Psychiatry*, 1956, 19, 149-172.—Data, collected from interviews with 20 American soldiers repatriated from Communist Chinese prisons in 1953, are described in a composite picture. The experiences of these randomly chosen individuals were compared by 3 psychiatrists with the accounts of 300 other men. The prisoner-of-

war experience, the indoctrination program and the reactions to the program are outlined, with reference to different reactions by various personality types. The effectiveness of the simultaneous use of several techniques is evaluated. They failed in general to change the beliefs of prisoners but succeeded in eliciting and controlling behavior during imprisonment. Some recommendations are set forth for further understanding of brainwashing.—*C. T. Bever.*

5906. Scheuch, Erwin K., & Rüschmeyer, Dietrich. (U. Köln, Germany.) *Soziologie und Statistik; über den Einfluss der modernen Wissenschaftslehre auf ihr gegenseitiges Verhältnis.* (Sociology and statistics; on the influence of the modern theory of science on their mutual relations.) *Köl. Z. Soziol.*, 1956, 8, 272-291.—At present important changes in the relationship between sociology and statistics can be observed. This development started in U.S.A. Sociological theory will profit by the translation of its symbols in the unequivocal language of mathematics. This makes a close co-operation of mathematically trained statisticians and sociologists necessary. Special techniques for sociological problems will have to be devised by mathematicians, whereas the sociologists will have to give them a clear formulation of their problems. 34 references.—*M. Haas.*

5907. Taylor, F. Kräupl. *Awareness of one's social appeal.* *Hum. Relat.*, 1956, 9, 47-56.—The present paper reports the results for dyadic relations, for therapeutic and student groups which were relatively stable in composition. The distribution of dyadic self-appeal scores does not deviate markedly from a normal distribution; the average degree of awareness was not very high though it was better than chance and improved with length and intimacy of acquaintance; unpopular group members were ignorant of dyadic feelings of others towards them; and dominance status or autistic bias did not affect awareness scores.—*R. A. Littman.*

5908. Vayhinger, John Monroe. *Prediction from the Rorschach of behavior in a group situation.* *Dissertation Abstr.*, 1956, 16, 1286.—Abstract.

5909. Viteles, M. S. (U. Pennsylvania, Philadelphia.) *La nouvelle Utopie.* (The new Utopia.) *Rev. Psychol. appl.*, 1956, 6, 1-14.—The present-day creators of new worlds base their products upon the remodeling of human beings. Social science and social reform become important methods for this purpose. Attempts to reach the goals rely upon a bit by bit movement toward social change. The fact that the new sciences of human behavior have already made a contribution to human well-being does not entitle the psychologist to play the role of architect for Utopia. 35-item bibliography.—*W. W. Wattenberg.*

(See also abstracts 5256, 5259, 5261, 5377, 6257, 6521)

METHODS & MEASUREMENTS

5910. Albert, Ethel M. *The classification of values; a method and illustration.* *Amer. Anthropol.*, 1956, 58, 221-248.—A descriptive-analytic scheme for classifying values as elements of a total system is presented and illustrated with relevant data from 5 Southwestern American cultures. There is included a discussion of classification theory and methodology

as well as a description of the Ramah Navaho value system by way of illustration.—H. Angelino.

5911. Bucher, Rue; Fritz, Charles E., & Quarantelli, E. L. Tape recorded interviews in social research. *Amer. sociol. Rev.*, 1956, 21, 359-364.—(See *Sociol. Abstr.*, 1957, 5, abs. 3112.)

5912. Catton, William R., Jr. A retest of the measurability of certain human values. *Amer. sociol. Rev.*, 1956, 21, 357-359.—(See *Sociol. Abstr.*, 1957, 5, abs. 3113.)

5913. Douglas, J. W. B., & Blomfield, J. M. The reliability of longitudinal surveys. *Milbank mem. Fd. Quart.*, 1956, 34, 227-252.—A national sample of children has been kept under observation in Great Britain for the past 10 years, as a result of a study done in 1946 using this sample. Longitudinal surveys seem to be reliable, on the basis of this follow-up study, which show no significant bias as a result of losses of the child sample, and which show that reliability of information given by the mothers concerning the children's development is high because the errors which are made are not large enough to lead to an appreciable distortion of facts. Internal migration is a possible difficulty, but can be reduced by covering large regional aggregates instead of a single administrative area.—H. D. Arbitman.

5914. Dunnette, Marvin D., Uphoff, Walter H., & Aylward, Merriam. (U. Minnesota, Minneapolis.) The effect of lack of information on the undecided response in attitude surveys. *J. appl. Psychol.*, 1956, 40, 150-153.—The "undecided" response in attitude inventory items may be selected because of actual neutrality, item ambiguity, lack of information, antagonism to the test procedure, or a need to "straddle." The major determiners are probably actual neutrality, "fence-straddling" attitudes, or lack of information.—P. Ash.

5915. Easton, David. (U. Chicago, Ill.) Limits of the equilibrium model in social research. *Behav. Sci.*, 1956, 1, 96-104.—A discussion of the equilibrium model, varieties of equilibria, and the major shortcoming of this model which is due to the lack of data quantifiable on either ordinal or cardinal scales.—J. Arbit.

5916. Edwards, Allen L. (U. Washington, Seattle.) A technique for increasing the reproducibility of cumulative attitude scales. *J. appl. Psychol.*, 1956, 40, 263-265.—From a set of 40 statements for which Thurstone Scale values had previously been determined, a set of 9 statements were presented in paired-comparison form (36 pairs) to 370 psychology students. "... using the method of paired comparisons in conjunction with a set of opinion statements with known scale values ... has promise for the construction of attitude scales with a relatively high degree of reproducibility and satisfactory reliability."—P. Ash.

5917. Fine, Harold J., & Zimet, Carl N. A quantitative method of scaling communication and interaction process. *J. clin. Psychol.*, 1956, 12, 268-271.—A scale is described for recording the emotional quality of the responses of individuals in group discussions. The scale is presented and its reliability assessed.—L. B. Heathers.

5918. Hunter, Floyd; Schaffer, Ruth Connor, & Sheps, Cecil G. Community organization; action

and inaction. Chapel Hill, N. C.: University of North Carolina Press, 1956. xv, 268 p. \$5.00.—A report of an interdisciplinary study (sociology, medicine, public health, anthropology, social work) of Salem, Massachusetts. It describes how this city carried out their own self-study concerning how they could best meet community health problems. Systematic observations, recordings, and interpretations were made of how these people reached decisions, how their plans were formulated and how their action programs were initiated and carried out. Bibliography.—L. B. Costin.

5919. Shelley, Harry P. (U. Nebraska, Lincoln.) Response set and the California attitude scales. *Educ. psychol. Measmt.*, 1956, 16, 63-67.—"The unidirectionality of the items in the California attitude scales suggests the possibility of a response set, acquiescence, as a source of variance in scale scores. Analysis of several studies using the California scales provides supporting evidence for such a response set." A significant r between "like much" responses on the Perceptual Reaction Test and the California Anti-Semitism scale is suggested as evidence of the response set of acquiescence.—W. Coleman.

5920. Suci, George J. (U. Illinois, Urbana.) Vallance, Theodore R., & Glickman, Albert S. A study of the effects of "likingness" and level of objectivity on peer rating reliabilities. *Educ. psychol. Measmt.*, 1956, 16, 147-152.—Naval officer candidates were asked to list in order the 5 men in their section (1) whom you like best, (2) who, in your opinion, are the most outstanding O.C.S. students, and (3) who, in your opinion, hold greatest promise as future officers. Average reliabilities in the low .90's were obtained. No evidence was secured that reliabilities of peer ratings increase as the "... effects of likingness are reduced." More objectively based peer ratings did not produce any higher reliabilities as had been hypothesized.—W. Coleman.

5921. Taft, Ronald. Intolerance of ambiguity and ethnocentrism. *J. consult. Psychol.*, 1956, 20, 153-154.—Using a Bogardus-type scale of ethnocentrism, 36 volunteers were rated as prejudiced or unprejudiced. Testing the Ss individually and with a partner in 2 autokinetic effect situations, it was found that "further evidence is provided that those subjects who are comparatively higher on ethnocentrism are also more inclined to adopt an anchoring point quickly in an unstructured situation. The anchoring points used in the above experiment were zero movement, a steady personal norm, and the norms of one's partner."—A. J. Bachrach.

5922. Zimmer, Herbert. Validity of extrapolating nonresponse bias from mail questionnaire follow-ups. *J. appl. Psychol.*, 1956, 40, 117-121.—To study the accuracy with which nonresponse bias in mail questionnaires can be extrapolated from the trend derived from the several coordinate values of initial and follow-up response groups for any given variable, data were obtained on 7 variables for 3 groups. Of the 7 biographical data variables considered, 5 were found to be consistent with the hypothesis that the response-nonresponse probability function indicates the presence and direction of non-response bias.—P. Ash.

(See also abstract 6744)

CULTURES & CULTURAL RELATIONS

5923. Barron, Milton L. (Ed.) **American minorities; a textbook of readings in intergroup relations.** New York: Knopf, 1957. xvii, 518, vii p. \$5.75.—The readings include the following subjects: racial psychology, racial differences, prejudice, authoritarian personality, discrimination in college admissions, integration, immigration, organized religion, religion and class structure, Protestant-Catholic tensions, assimilation of ethnic groups, acculturation in schools, role of police, fair employment, group tensions, definition of nationality, majority and minority Americans in magazine fiction. Specific groups dealt with are Indian, Negro, Japanese, Puerto Rican, Irish, Polish, Jewish, and Italian.—G. K. Morlan.
5924. Berreman, Gerald D. (Cornell U., Ithaca, N. Y.) **Drinking patterns of the Aleuts.** *Quart. J. Stud. Alcohol*, 1956, 17, 503-514.—Home brew is used and takes 8 days to set so planned drinking is the only kind and its purpose is to get drunk. Aleuts express emotions very little when sober but are labile when intoxicated. Comparisons are made with Lemert's data on Northwest Coast Indians.—W. L. Wilkins.
5925. Brown, Warren, & Alers, J. Osca. (The City Coll., N. Y.) **Attitudes of whites and non-whites toward each other.** *Sociol. soc. Res.*, 1956, 40, 312-319.—A total of 149 personal interviews were held with white persons and 116 with non-whites. Attitudes of both are analyzed in detail. The author summarizes the attitudes of whites toward non-whites as favorable.—S. M. Amatora.
5926. Carstairs, George Morrison. **Hinjra and jiryan: Two derivatives of Hindu attitudes to sexuality.** *Brit. J. med. Psychol.*, 1956, 29, 128-138.—"Two aspects of the sexual life of high-caste Hindus in a village community in northern India are described: the attitude towards homosexuality, which is at once repudiated and institutionalized, and the widespread hypochondriac concern over jiryan, or spermatorrhoea. The emotional complexes which perpetuate these social phenomena have been analysed, and it is suggested that their origins lie in the pattern of relationships within the Hindu family during a child's first few years. These relationships are significantly different in certain emphases from the range of patterns found in Europe and America. They are shown to be reflected in the religious beliefs of Hindus as well as in the relations between men and women in that society."—C. L. Winder.
5927. Codere, Helen. **The amiable side of Kwakiutl life: the potlatch and the play potlatch.** *Amer. Anthropol.*, 1956, 58, 334-351.—The present article demonstrates that Kwakiutl culture contains positive and amiable characteristics as well as the "famous" negative ones. It is the author's contention that Kwakiutl data can no longer be used to support the old configurationist theory of the simple analogy between a neurotically integrated individual personality and a whole integrated culture.—H. Angelino.
5928. Dhairyam, Desaraj. **Personality differences between a Hindu and an American group.** *Dissertation Abstr.*, 1956, 16, 1281.—Abstract.
5929. Drustine, Leon. **Some factors in anti-Negro prejudice among Puerto Rican boys in New York City.** *Dissertation Abstr.*, 1956, 16, 1488.—Abstract.
5930. Gladstone, Arthur. (Swarthmore Coll., Pa.) **Some cultural factors in primitive warfare.** *Bull. Res. Exch. Prev. War*, 1956, 4, 99-103.—Relations between warfare and several other aspects of culture in primitive societies are discussed. Four dimensions are distinguished along which wars may vary. A limited examination of ethnographic reports suggests that level of social organization, differentiation of in-group and out-group, and provocation to aggression from within the group may be related to the variations in warfare.—H. C. Kelman.
5931. Hansen, Carl F. **Miracle of social adjustment; desegregation in the Washington, D. C. schools.** New York: Anti-Defamation League of B'nai B'rith, 1957. 70 p. \$0.35.—This freedom pamphlet describes the policies and techniques utilized in desegregating the Washington, D. C. school system.—C. K. Bishop.
5932. Hobhouse, L. T. **The simplest peoples: Part I. A comparative study. Part II. Peace and order among the simplest peoples.** *Brit. J. Sociol.*, 1956, 7, 77-119.—This article is the comparative study of the social organization of some of the most primitive peoples of the world. Among those primitive peoples analyzed were the Adamanese, Semang, Sakai, Negritos of the Philippines, and others. Most of these peoples were found to be relatively peaceable, generally speaking.—R. M. Frumkin.
5933. Kaplan, Bert, & Plaut, Thomas F. A. **Personality in a communal society; an analysis of the mental health of the Hutterites.** Lawrence, Kans.: University of Kansas Publications, 1956. xi, 116 p. \$3.25.—This book contains the results of a study which attempts to evaluate the relationship between mental health and the cultural pattern of a group of people—the Hutterites—who comprise a close-knit religious sect living in small communal groups located in northern United States and Canada. Selected projective techniques were used to aid in analyzing and describing the personalities of a large sample of "more or less normal" members of the group.—H. Angelino.
5934. Kimball, Solon T. (Teachers Coll., Columbia U., New York.) **American culture in Saudi Arabia.** *Trans. N. Y. Acad. Sci.*, 1956, 18, 469-484.—The author was invited in the spring of 1955 by the Training Department of the Arabian American Oil Company (Aramco) to participate in their summer institute for teachers of American children. Of his impressions concerning life among the American employees of Aramco and their families he writes: "The paternalistic effort [of Aramco] produced an almost ideal variety of community facilities, but the substance of community life, however, seemed distorted and a little unreal. Certain aspects of American character were exaggerated and, in particular, the traditional female role appeared difficult of realization while, for the men, concern with status and money was primary."—P. Swartz.
5935. Klapp, Orrin E. **American villain-types.** *Amer. sociol. Rev.*, 1956, 21, 337-340.—(See *Sociol. Abstr.*, 1957, 5, abs. 3139.)
5936. Lewis, Oscar, & Barnouw, Victor. **Caste and the Jajmani system in a North Indian village.**

Sci. Mon., N. Y., 1956, 83, 66-79.—How "... the *jajmani* system functions at the present time in a particular village, Rampur, about 15 miles west of Delhi" is described and is then evaluated. Although "Wiser drew an essentially benevolent picture of how it provided 'peace and contentment' for the villagers" and the "... account by Opler and Singh has a similar emphasis . . . , it seems evident that the relationship between *jajmani* and Kamin lends itself to the exploitation of the latter. . . . The decline of the *jajmani* system . . . will not necessarily be followed by an automatic or speedy disintegration of the caste system. Instead, caste may continue to take on new functions and manifestations."—S. J. Lachman.

5937. McCormick, James P. (Wayne U., Detroit, Mich.) Japan: the mask and the mask-like face. *J. Aesthet.*, 1956, 15, 198-204.—The Japanese habits related to face-saving are linked to the mask and the mask-like face.—P. R. Farnsworth.

5938. Mann, John Harvey. The influence of racial prejudice on sociometric choices and perceptions. *Dissertation Abstr.*, 1956, 16, 1296.—Abstract.

5939. Mayntz, Renate, & Perlmutter, Howard V. Einiger Versuchsergebnisse zum Problem der Vorstellungsbildung und Interpretation von Kommunikation. (Results of some experiments on the problem of the formation of ideas and the interpretation of communications.) *Köl. Z. Soziol.* 1956, 8, 292-320.—Parallel experiments were carried out in various countries. These experiments are described and the hypotheses derived from them are stated. It was found that the nationality of a person is a characteristic that exercises a strong influence on our idea of that person, because a relatively great number of traits seem to be indicated by it. In the case of foreigners, the knowledge of the nationality of an unknown or vaguely known person is more effective in the image formation than that of his occupation.—M. Haas.

5940. Mertens de Wilmars, Ch. Vers une étude plus systématique des variables psychologiques de l'acculturation. (For a more systematic study of the psychological variables in acculturation.) *Bull. C.E.P.S.I.*, n.d., No. 33, 1-35.—The present study sums up and analyzes a part of the investigations made by the Center of Psychology and Pedagogy of the "Union Minière du Haut-Katanga." A detailed report of conditions and the responses of those tested with an estimate of the value of the results. The underlying thought: it is the experiences of men that make them different. 40-item bibliography, list of tests, methods, and results.—M. M. Gillet.

5941. Organski, Katherine Fox. Change in tribal South Africa. *Dissertation Abstr.*, 1956, 16, 1524.—Abstract.

5942. Radin, Paul. The trickster; a study in American Indian mythology. New York: Philosophical Library, 1956. xi, 211 p. \$6.00.—The mythic figure of the Trickster is to be found in the lore of many different cultures. It appears as the medieval jester and survives in the figure of the clown. "Trickster is at one and the same time creator and destroyer, giver and negator, he who dupes others and who is always duped himself. He wills nothing consciously." The Trickster story

cycle of the Winnebago Indians is presented in detail, supplemented by the Winnebago Hare Cycle, and the Assiniboine and Tlingit Trickster myths. Radin comments on "The nature and meaning of the myth"; Kerényi on "The Trickster in relation to Greek mythology"; and C. G. Jung "On the psychology of the Trickster figure."—E. W. Eng.

5943. Richmond, Anthony H. Immigration as a social process: the case of the coloured colonials in the United Kingdom. *Social econ. Stud.*, 1956, 5, 185-201.—An analysis of the problem of the colored West Indians who emigrated to the United Kingdom. The problems show many similarities to the problem of Negro integration in American society.—R. M. Frumkin.

5944. Rosenthal, Celia Stopnicka. The Jews of Barranquilla. *Jew. soc. Stud.*, 1956, 18, 262-274.—A study of the acculturation of a Jewish community in South America, based on personal observations, numerous conversations, and 15 formal interviews. The Jewish community, of 865 Jews, is divided into 3 sub-ethnic groups. There are no marked divisions along political or class lines. Cultural differences of the 3 groups are the greatest dividing force in the Jewish community. Religion has little meaning for them, and it is difficult to determine the source of the very definite in-group loyalty, which makes most of them continue to identify themselves as Jews despite the lack of a Jewish education and the limited activities offered by the Jewish community.—S. Glasner.

5945. Samora, Julian, & Deane, William N. Language usage as a possible index of acculturation. *Sociol. soc. Res.*, 1956, 40, 307-311.—It is suggested that language usage would be an important measure of acculturation because of its multi-dimensional usage and meaning. By the study of language usage it can be determined if a minority group member prefers to use the language of the dominant group rather than his native tongue. It might be possible but more difficult to study the presence or absence of phonetical accretions on the part of the ethnic person. The author also discusses means of measurement.—S. M. Amatora.

5946. Sayres, William C. Ritual kinship and negative affect. *Amer. sociol. Rev.*, 1956, 21, 348-352.—(See *Sociol. Abstr.*, 1957, 5, abs. 3136.)

5947. Smith, Elmer Lewis. A study of acculturation in an Amish community. *Dissertation Abstr.*, 1956, 16, 1526-1527.—Abstract.

5948. Stróbl, S. Over het raden naar de nationaliteit van personen op basis van hun (gefotografeerde) uiterlijk. (Guessing the nationality of persons from their (photographed) countenance.) *Ned. Tijdschr. Psychol.*, 1956, 11, 522-536.—187 subjects were asked to guess the nationality of the persons portrayed on a series of photographs. An analysis of the results indicates that the subjects more often guessed their own nationality than any other, whereas the frequency of occurrence of a nationality in the guesses diminished with increasing topographical distance of the country concerned to that of the subject. Objective, observable characteristics of the photographs were found to be the basis of judgments.—R. H. Houwink.

5949. Turhan, Mümtaz. (U. Istanbul, Turkey.) **Die Bedeutung einiger Faktoren für den Kulturwandel.** (The meaning of some factors in acculturation.) *Köl. Z. Soziol.*, 1956, 8, 224-242.—When Western cultures are transferred to primitive non-European civilizations, the forms of the elements of the new culture may be adopted without any understanding of their functions. Primitive peoples do not think scientifically; they do not base their conclusions on causal relations; they interpret reality in a subjective way. The transferred elements are used in the new culture without any reference to their meanings; only surface-similarities and differences are noticed. Although every new element may in itself be useful for progress, the result will be a general loss in values and attitudes. The old order, even if primitive, was true and consistent; thus the transfer may create an unbalanced situation in which the individual loses his orientation. 32 references.—M. Haas.

5950. Willems, Emilio. (Vanderbilt U., Nashville, Tenn.) **Innere Widersprüche im Gefüge primitiver Kulturen.** (Inner inconsistencies in the patterns of primitive cultures.) *Köl. Z. Soziol.*, 1956, 8, 206-223.—The author states that cultures as well as individuals are not free from inconsistencies and logical contradictions in their behavior; this ambivalence, however, need not bring about social or personal problems for them. The author sees in these inconsistencies problems of cultural integration. 17 references.—M. Haas.

5951. Woodbury, Richard B. (Columbia U., New York.) **The antecedents of Zuni culture.** *Trans. N. Y. Acad. Sci.*, 1956, 18, 557-563.—There is little doubt that Zuni civilization has undergone many different contacts and influences during the last 6 or 7 centuries, especially from the Chaco area in Pueblo III times, and subsequently, it is likely, from the south and east. Zuni contacts have been close with both the Hopi and the Acoma; through the Acoma it has influenced the Rio Grande. "That Zuni has preserved its distinctiveness and independence testifies to the vigor of its conservative tradition. That the social and ceremonial systems were complex, and even confusing, is hardly surprising in view of their repeated adjustment to consolidation and amalgamation of hitherto separate groups." 16 references.—P. Swartz.

(See also abstracts 5910, 6315)

SOCIAL INSTITUTIONS

5952. Affemann, Rudolf. **Psychologie und Bibel.** (Psychology and the Bible.) Stuttgart, Germany: Klett, 1957. 126 p. DM 13.50.—C. G. Jung's psychology is the expression of a pantheistic, mystical world-view. Jung conceives of God as the world-soul and thus equates the sphere of religion with that of psychology. Religion then is understood as the expression of the psychic archetypes in man. Such a conception conflicts with the personal relation of man and God as expressed in the Bible. Theology can, however, learn much of human psychic reality from Jung and other psychologists, despite the incompatibility of Jung's personal metaphysical views with Christianity.—E. W. Eng.

5953. Back, Kurt W., Hill, Reuben, & Stycos, J. Mayone. **The dynamics of family planning. Mar-**

riage Fam. Living, 1956, 18, 195-200.—"It is the thesis of this paper that planning the family size is one of the functions of a successful family . . . as a special instance of group functioning." Although conforming "to cultural patterns" the family consists of individuals each with "its own value system and action possibilities . . . personal preferences" and ability to plan and organize their lives. "Although in Puerto Rico at least half the people try birth control methods, the number of effective family planners is much smaller. . . . The people most likely to use birth control methods regularly are . . . primarily those who organize effectively in general. . . . There is little difference in fertility between those who have used birth control methods at all and those who have never used them."—M. M. Gillet.

5954. Beardsley, Seymour W., & Edgell, Alvin G. **Human relations in international affairs; a guide to significant interpretation and research.** Washington, D. C.: Public Affairs Press, 1956. vii, 40 p. \$1.00.—An annotated bibliography of 117 items concerned with the "human relations" aspects of international affairs. Emphasis is on relevant publications in anthropology, psychology, and sociology, but other disciplines are also represented. The bibliography is limited to books or to issues of periodicals which are entirely devoted to one theme. Only English publications, appearing during or since World War II, are included. Items are graded in terms of level of difficulty and a topical cross-reference guide is appended.—H. C. Kelman.

5955. Benson, Purnell H. (Drew U., Madison, N. J.), Brown, Arlo, Jr., & Sheehy, Loretta Maria. **A survey of family difficulties in a metropolitan suburb.** *Marriage Fam. Living*, 1956, 18, 249-253.—Questionnaires included "check-lists of 1. various kinds of family difficulties, 2. how family difficulties are solved, 3. agencies whose services are known or used. . . . The survey . . . illustrates the type of results which can be obtained by an informal random sampling procedure with a minimum expenditure of time and funds."—M. M. Gillet.

5956. Best, Wallace H., & Sohner, Charles P. **Social distance and politics: some selected relationships.** *Social. soc. Res.*, 1956, 40, 339-342.—In pointing out certain selected relationships, the authors discuss (1) political issues and social distance analysis; (2) relative distance toward group types; and (3) the need for additional study. The author feels that social distance methodology could be used to study the basic personality forces and political identification or affiliation.—S. M. Amatora.

5957. Blake, Robert R., Rhead, Clifton C., Wedge, Bryant, & Mouton, Jane S. **Housing architecture and social interaction.** *Sociometry*, 1956, 19, 133-139.—"Differences in the internal architecture of military barracks closed and open cubicles have been shown to be related to social relations among occupants. Results from different parts of the study are internally consistent and support the conclusion that closed cubicles significantly increase relationships with others in the same cubicle and reduce them with others located in the same barracks but living in different cubicles." Implications of the findings are discussed in terms of group morale and problems of individual and group adjustment.—H. P. Shelley.

5958. Blau, Peter M. Social mobility and interpersonal relations. *Amer. sociol. Rev.*, 1956, 21, 290-295.—(See *Sociol. Abstr.*, 1957, 5, abs. 3205).
5959. Bowerman, Charles E. Age relationships at marriage, by marital status and age at marriage. *Marriage Fam. Living*, 1956, 18, 231-233.—"Variability in ages of mates: as women grow older they tend to marry men closer to their own age . . . a single person . . . is younger on the average than one who has been previously married; the median age of widowed mates is higher than that of divorced mates. . . . As men grow older they tend to marry women increasingly younger than themselves."—M. M. Gillet.
5960. Brim, Orville G., Jr., & Wood, Nancy. Self and other conceptions in courtship and marriage pairs. *Marriage Fam. Living*, 1956, 18, 243-248.—"Intimacy as measured by stages of courtship, does not result in increasing the degree to which a pair member sees the other as having subconsensual characteristics. . . . It may well be that as courtship progresses . . . pair members, because of various important family and other social considerations, must now begin to assess the other's acceptability as a marriage partner in terms of social rather than personal qualifications."—M. M. Gillet.
5961. Cannon, Kenneth L., & Gingles, Ruby. (U. Nebraska, Lincoln.) Social factors related to divorce rates for urban counties in Nebraska. *Rur. Sociol.*, 1956, 21, 34-40.—Differences between counties in divorce rates were found to be due to differences in amount of foreign population, income level, and urbanization.—H. K. Moore.
5962. Clark, Kenneth E., & Jones, Robert L. (U. Minnesota, Minneapolis.) Changes in attitudes toward a low-rent housing project. *J. appl. Psychol.*, 1956, 40, 201-212.—Opinions of residents in the neighborhood of a low-rental housing project were studied before construction of the project, after construction but before occupancy, and after occupancy. There was a consistent trend in the more favorable direction in attitudes toward the project, in regard to economic-centered fears, in regard to effect of the project on neighborhood attractiveness, and similar factors. Individuals who responded in the survey at two stages shifted in the same direction as the total samples.—P. Ash.
5963. Clarke, Alfred C. The use of leisure and its relation to levels of occupational prestige. *Amer. sociol. Rev.*, 1956, 21, 301-307.—(See *Sociol. Abstr.*, 1957, 5, abs. 3194.)
5964. Corsini, Raymond J. (U. Chicago, Ill.) Multiple predictors of marital happiness. *Marriage Fam. Living*, 1956, 18, 240-242.—"No one, it appears, has compared the relative and combined effectiveness of predictors of marital happiness based on personality, background and similarity. It will be the purpose of this report to do so. . . ." Conclusion: "it may be that happy and unhappy couples do not actually differ with respect to similarity . . . before marriage, but do become more similar if their marriage is happy."—M. M. Gillet.
5965. Donnison, David. The social structure of a Canadian community. *Brit. J. Sociol.*, 1956, 7, 346-351.—A study of social administration, particularly social services in the small town of Brockville, Ontario, Canada.—R. M. Frumkin.
5966. Dotson, Floyd, & Dotson, Lillian Ota. (U. Connecticut, Storrs.) Urban centralization and decentralization in Mexico. *Rur. Sociol.*, 1956, 21, 41-49.—Large cities are growing more rapidly than small cities. Negligible is the effect of such decentralizing agencies as the automobile, motor truck and electric street car.—H. K. Moore.
5967. Dynes, Russell R. (Ohio State U., Columbus.) Rurality, migration and sectarianism. *Rur. Sociol.*, 1956, 21, 25-28.—Using an attitude scale on sectarianism on Columbus, Ohio adults, the generalization was tested that through participation in sectarian groups, rural migrants cushion the "culture shock" produced by abrupt exposure to urbanism. The sect does cushion the shock if the migrant is from a lower socio-economic level.—H. K. Moore.
5968. Feldman, Frances Lomas. (U. S. Calif., Los Angeles.) The family in a money world. New York: Family Service Association of America, 1957. iv, 188 p. \$2.50.—The book represents a synthesis of information related to the meaning and use of money. The first 6 chapters deal with complex interrelationships among economic, social, cultural, and psychological aspects of money. Chapters 7 to 10 discuss budget counseling and related services. The last 4 chapters analyze human needs and values and provide information about basic budget items, family resources, savings, supplementing income, and planning budgets. Some guides are presented for applying this kind of information to case situations. Chapter references and extensive bibliography.—L. B. Costin.
5969. Foote, Nelson N. (U. Chicago, Ill.) A neglected member of the family. *Marriage Fam. Living*, 1956, 18, 213-218.—"If we view human personality as process and product, it exists as an individual entity . . . always emerging out of interaction between self and significant others. . . . The most significant others in one's development are the members of his family, among which the dog has been neglected to the loss of understanding."—M. M. Gillet.
5970. Freedman, Ronald, & Freedman, Deborah. (U. Michigan, Ann Arbor.) Farm-reared elements in the non-farm population. *Rur. Sociol.*, 1956, 21, 50-61.—More than twice as many farm-reared adults are living off the farm as on the farm. The farm-reared in the non-farm population are concentrated in low status positions, are less active politically, have less confidence in political activity, and the Protestants among them attend church slightly more regularly, than the non farm-reared.—H. K. Moore.
5971. Gallaher, Art, Jr. A restudy of Plainville, U.S.A.: structural changes in the status ranking system of a rural community. *Dissertation Abstr.*, 1956, 16, 1523.—Abstract.
5972. Graham, Saxon. (U. Pittsburgh, Pa.) Class and conservatism in the adoption of innovations. *Hum. Relat.*, 1956, 9, 91-100.—150 families were studied with respect to their reactions to five innovations—television, canasta, super-markets, and two forms of health insurance. The families were differentiated by class status and the results of the intensive interviews were analyzed for differences among classes. Conservatism did not appear as a general trait of any one class with respect to the innovations studied and it is concluded that "the relation between class and conservatism: is much more

complex than traditionally supposed." 20 references.—R. A. Littman.

5973. Greenwood, David. *Essays in human relations*. Washington, D. C.: Public Affairs Press, 1956. viii, 76 p. \$2.00.—Contemporary American literature on the family is examined in a series of essays. The Kinsey studies are critically assessed with respect to (1) Kinsey's implicit ideology, and (2) the problems brought to light by Kinsey's findings regarding sex differences in sexual behavior as a function of education. In a series of 3 essays family group patterns, age at marriage, and the development of the family as an institution are discussed. The final essay critically studies Parson's use of the concept of personality.—H. P. Shelley.

5974. Jahoda, Marie. (New York U.) *Psychological issues in civil liberties*. *Amer. Psychologist*, 1956, 11, 234-240.—"Many observers of the current crisis of civil liberties in this country agree with regard to one of its aspects: this is a time of growing conformism . . . of severely restricted tolerance for deviation from the medium and the mediocre." Among the major variables relating to conformism are "an inducement to go along," the "situational context," and "individual predispositions." Four processes of conformism, called consentience, conformance, convergence, and compliance, are identified and discussed. The utility of distinguishing between these processes is discussed.—S. J. Lachman.

5975. Kahl, Joseph A. *The American class structure*. New York: Rinehart, 1957. xviii, 310 p. \$4.50.—"It is the purpose of this book to organize the two bodies of research—local and national—into a unified portrait of the class system of present-day America." There are 10 chapters each with annotated references appended to them. Chapter headings are: Dimensions of class; Positions and prestige; Occupational prestige and social change; Income, wealth and style of life; Web of interaction; Class consciousness and political ideology; Classes as ideal types; emergent values; Ethnic and race barriers; Succession and mobility: the occupational base; and Succession and mobility: motivation and education.—R. A. Littman.

5976. Kimper, Frank Walter. *A psychological analysis of the spiritual direction given by Francis of Sales*. *Dissertation Abstr.*, 1956, 16, 1496.—Abstract.

5977. Kirkendall, Lester A., & Tebor, Irving. (Ore. St. Coll., Corvallis.) *A syllabus and reading guide for courses in marriage and family relations*. Dubuque, Iowa: Wm. C. Brown Co., 1957. viii, 137 p. \$2.25.—Detailed study guides, for the student, in all topics likely to need discussion, 46 in all, and a list of 29 most useful books, and how to use them.—M. M. Gillet.

5978. Kornhauser, Arthur. (Ed.) (Wayne State U., Detroit.) *Problems of power in American democracy*. Detroit, Mich.: Wayne State University Press, 1957. xii, 239 p. \$5.00.—The 5 Franklin Memorial Lectures in Human Relations focus on the question of how the existing structure of power in America impinges upon the democratic processes and ideas. The topics include: Power in American society as resource and problem by R. S. Lynd; Political power and democratic values by H. D. Lasswell; Power re-

lationships and patterns of personal development by A. H. Maslow; The power elite: military, economic, and political by C. W. Mills, and Power relationships and the role of the social scientist by Arthur Kornhauser.—E. L. Gaier.

5979. LeMasters, E. E. *Modern courtship and marriage*. New York: Macmillan, 1957. xii, 619 p. \$5.50.—Detailed discussions of the various types of courtship in modern life, "dating" in its various forms, and the role of sex; marriage in modern society and the conditions and customs affecting it. Marriage success and failures, causes for divorce and possible ways to prevent failures. The author believes that a marriage text should help a student understand not only his own but also society's problems in courtship and marriage, which are only part of the rest of our culture.—M. M. Gillet.

5980. Luce, R. Duncan (Columbia U., New York), & Rogow, Arnold A. *A game theoretic analysis of congressional power distributions for a stable two-party system*. *Behav. Sci.*, 1956, 1, 83-95.—Game theory gives a definition of "power" as applied to coalitions. This study applied this concept to the American legislative apparatus (the Congress and President). Several generalizations are made concerning the conditions under which power resides with various factions. These statements appear to be consistent with the findings of political scientists. The approach indicates other results which have thus far not been emphasized or noted.—J. Arbit.

5981. Mack, Raymond W., Murphy, Raymond J., & Yellin, Seymour. *The Protestant ethic, level of aspiration, and social mobility: an empirical test*. *Amer. sociol. Rev.*, 1956, 21, 295-300.—(See *Sociol. Abstr.*, 1957, 5, abs. 3212.)

5982. Monahan, Thomas P. (Philadelphia Municipal Court, Pa.) *The number of children in American families and the sharing of households*. *Marriage Fam. Living*, 1956, 18, 201-203.—A report of actual facts as measured against "census statistics," about "double-up" of families, numbers of children and the persons included in "family" groups. The "data on family composition do not reveal any very remarkable shift in the prevailing size of the American family."—M. M. Gillet.

5983. Montague, Joel B., Jr. (State Coll. Washington, Pullman.) *Class or status society*. *Sociol. soc. Res.*, 1956, 40, 333-338.—From the discussion, it appears that the interaction and interdependence existing between classes in this country could be better described as antagonistic operation. The connotations of system are the existence of some form of interaction for interdependence between parts. Such an existence is alleged between classes.—S. M. Amatoria.

5984. Morrison, William A. (U. Connecticut, Storrs.) *Attitudes of males toward family planning in a Western Indian village*. *Milbank mem. Fd. Quart.*, 1956, 34, 1-25.—The sample in this study consisted of 697 married males, ages 15-54, residents of Badlapur Village in India. In the sample 28.2% of the males expressed a desire for no further offspring, and 25.8% of the same sample group stated that they would use contraceptives. "... the number of living children, number of living male offspring, years married, age, and education were significantly

associated with the desire for additional offspring and the 4 variables of education, number of living children, number of living male offspring, and caste were similarly associated with willingness to use contraceptives.—H. D. Arbitman.

5985. Muhsam, H. V., & Kiser, Clyde V. Social and psychological factors affecting fertility. XXXII. The number of children desired at the time of marriage. *Milbank mem. Fd. Quart.*, 1956, 34, 1299-1324.—A weakness of the data from the Indianapolis Study regarding number of children wanted at the time of marriage by wives and husbands is that they are ex post facto because the replies to the question regarding number of children wanted at marriage may be influenced by the number of children actually born. Incidentally the data point up the popularity of the 2-child family with the majority of wives and husbands stating at the time of marriage that they wanted 2 children.—H. D. Arbitman.

5986. Murtagh, John M., & Harris, Sara. Cast the first stone. New York: McGraw-Hill Book Co., 1957. vii, 307 p. \$4.50.—The book's 16 chapters, based on the interview method, aim to portray the social and legal aspects of prostitution in New York City. The volume is authored by Chief Magistrate Murtagh and by a sociologist-journalist. 5 p. glossary.—L. A. Pennington.

5987. Perry, Stewart E., Silber, Earle, & Bloch, Donald A. The child and his family in disaster; a study of the 1953 Vicksburg Tornado. *Nat. Acad. Sci.—Nat. Res. Coun. Publ.*, 1956, No. 393, (Disast. Stud. No. 5), vii, 62 p.—This study attempts to differentiate emotional responses of children to the disaster in terms of types of involvement. Areas are suggested for further research such as changes in the emotional structure of the family following traumatic disaster experiences, suppression of emotional expression about the experience, parent-child relationships during the experience, and the role of peer group relationships. Recommendations are given on the handling of children after a disaster.

5988. Schmidt, John Frank, & Rohrer, Wayne C. (U. Maryland, College Park.) The relationship of family type to social participation. *Marriage Fam. Living*, 1956, 18, 224-230.—"Does the type of family composition affect the amount and quality of social participation of the family in the community?" The conclusions touch upon the number of activities engaged in by members of a family, the degree of participation, and the amount of freedom for formal participation.—M. M. Gillet.

5989. Snyder, Eloise C. A quantitative analysis of Supreme Court opinions from 1921 to 1953; a study of the responses of an institution engaged in resolving social conflict. *Dissertation Abstr.*, 1956, 16, 1527-1528.—Abstract.

5990. Solomon, Erwin S. Social characteristics and fertility: a study of two religious groups in metropolitan New York. *Eugen. Quart.*, 1956, 3, 100-103.—A study of 410 white students, of whom 60% were Jewish and 40% Christian (three-fourths Catholic, one-fourth Protestant), discloses that the relationships between fertility and I.Q. and father's occupation show little or no differentiation for fertility for the Jewish group when "controlled" by I.Q. and occupation; while fertility in the Christian group

demonstrates considerable variability and is inversely related with I.Q. of the student and occupation of the father.—G. C. Schwesinger.

5991. Stefani, Rosa Luisa. An exploratory study of values and practices in child-rearing among urban laboring class families in Puerto Rico. *Dissertation Abstr.*, 1956, 16, 1439.—Abstract.

5992. Strachey, Alix. The unconscious motives of war; a psychoanalytic contribution. New York: International Universities Press, 1957. 283 p. \$5.00.—The persistence of war can be attributed largely to psychological motives which can be recognized through psychoanalytic principles. They spring not merely from the deeper psychic levels of the individual as a private person, but from his attitudes of mind as a member of a group—in this case, the state or nation to which he belongs. The first part of the book is devoted to descriptions of private attitudes facilitating war. Part 2 considers how these attitudes influence and are influenced by group life; and part 3 suggests what additional measures might usefully be adopted to lessen the chances of war.—E. L. Gaier.

5993. Thakkar, K. K. The problem of casteism and untouchability. *Indian J. soc. Wk.*, 1956, 17, 44-49.—Casteism and untouchability are twin problems that seriously affect Indian society. *Varna* is an old concept dividing men into 4 classes by qualities or merits, not by birth. In modern times the *varnas* have been transformed into innumerable castes which are hereditary and rigid in boundary, e.g., prohibiting inter-dining and inter-marrying. Untouchability is restricted to certain indigenous Indians who do not belong to any of the 4 recognized castes. Surveys show public opinion to be against the practice of caste discrimination. Education is seen to play a dominant role in effecting the solution to this problem: social organization along old concept *varna* lines which recognizes capabilities of individuals.—R. Schaef.

5994. Tumin, Melvin M. (Princeton U., N. J.) Some disfunctions of institutional imbalances. *Behav. Sci.*, 1956, 1, 218-223.—In society the values and rewards associated with one institution often carry over to other institutions. This tends to put a strain on individual functioning as well as the entire achievement of the society. This is illustrated by the effects of the economic institution in the United States upon family life with the resultant effects upon the individual and society.—J. Arbit.

5995. Underwood, Kenneth Wilson. Protestant and Catholic: religious and social interaction in an industrial community. Boston: Beacon Press, 1957. xxi, 484 p. \$6.00.—Catholic-Protestant relations in the predominantly Catholic community of Holyoke, Mass., are examined by means of interviews, publications, etc. The pressure used to prevent Margaret Sanger from speaking, the contrasting views regarding salvation, worship, spiritual authority, organization of the religious community, gambling, tolerance and religious freedom, and interfaith association are described. There are also chapters on the relation of class structure of society to the churches, nationality influences, churches and recreation, jobs, labor movement, morality of politics, politics of churches, political reform, and political compromise.—G. K. Morlan.

5996. Wallace, Anthony F. C. (*U. Pennsylvania, Philadelphia.*) **Mazeway resynthesis: a biocultural theory of religious inspiration.** *Trans. N. Y. Acad. Sci.*, 1956, 18, 626-638.—The mazeway is defined as "the brain's organized and codified archive of cognitive residues of perception bearing on the characteristics of the extrabodily environment, the body itself, techniques, and values. The mazeway thus contains the individual's perception of the socio-cultural and natural system of which he is a part, and the mazeway determines his behavior in it." Religious inspiration is a therapeutic mazeway resynthesis. It restores an internal biopsychic equilibrium by "sorting assemblages into 2 or more systems on the criterion of goodness or badness." 21 references.—P. Swartz.

5997. Wallace, Anthony F. C. **Revitalization movements: some theoretical considerations for their comparative study.** *Amer. Anthropol.*, 1956, 58, 264-281.—Presented is a discussion of some preliminary finding on the comparative study of several religious revitalization movements. These movements are defined as "deliberate, organized, conscious efforts by members of a society to construct a more satisfying culture." The suggestion is offered that revitalization movements have been responsible for a large proportion of religious phenomena. These movements themselves are not only recurrent features but also extremely important ones in man's history.—H. Angelino.

5998. Weinberg, Abraham A. **Histaglut olim l'or hapsihoanaliza.** (Adjustment of immigrants in the light of psychoanalysis.) *Ofakim*, 1956, 10, 168-174.—Israel is a proper country to carry out comparative studies of persons coming from different cultures and their adjustment to the new conditions. A pilot-study was accomplished in 1954 in Jerusalem among newcomers, in order to search problems of mental health during their adjustment processes. The techniques used were: depth interview, closed questionnaire, tests. The results are explained in terms of psychoanalytical concepts and views, and some suggestions are given, how to treat newcomers in Israel, in order to avoid maladjustment and mental deviations.—H. Ormian.

(See also abstracts 5793, 5930, 5995, 6043, 6050, 6258, 6264, 6293, 6463, 6594)

LANGUAGE & COMMUNICATION

5999. Belbin, Eunice. (*U. Cambridge, Eng.*) **The effects of propaganda on recall, recognition and behaviour. I. The relationship between the different measures of propaganda effectiveness.** *Brit. J. Psychol.*, 1956, 47, 163-174.—"A field experiment, using road-safety propaganda presented in a Children's Cinema Club, showed that there was no positive relationship between the effects of the propaganda as shown by the tests of recall or recognition on the one hand and behaviour on the roads on the other. In the laboratory, an attempt was made to influence the subject's choice of fast or slow speed on a mechanical task by means of incidental propaganda. The 'effect' of the propaganda varied according to whether its influence was assessed by its attention value, its intelligibility, by how much could

be described or recognized, or by its capacity to influence behaviour." 28 references.—L. E. Thune.

6000. Bortner, Morton. **Forming impressions of persons from reading material.** *Dissertation Abstr.*, 1956, 16, 1275-1276.—Abstract.

6001. Brinton, James Everett. **Public attitudes toward the press.** *Dissertation Abstr.*, 1956, 16, 1248.—Abstract.

6002. Cannell, Charles F., & MacDonald, James C. (*U. Michigan, Ann Arbor.*) **The impact of health news on attitudes and behavior.** *Journalism Quart.*, 1956, 33, 315-323.—The objective of this survey was to determine the effect on smoking behavior of newspaper, magazine, radio and television stories about the relationship of smoking to cancer. It was found that "among non-smokers, the higher the education the more likely the person is to accept this relationship as proved. For the smokers, however, . . . the higher the education the less likely they are to accept it." Smokers are also less likely to report having read articles on health and science.—D. E. Meister.

6003. Deutschmann, Paul John. **The relationship between interest and perception of headline-type stimuli.** *Dissertation Abstr.*, 1956, 16, 1248-1249.—Abstract.

6004. Doehring, Donald G. **Changes in psychophysiological responses produced by delayed speech feedback.** *USN Sch. Aviat. Med. Res. Rep.*, 1956, No. NM 001 102 502, Rep. No. 1, iii, 8 p.—Certain responses to the stress of speaking with delayed feedback were compared with responses to the lesser stress of speech with direct feedback. Response measures were forearm and forehead tension, GSR, heart rate, respiration rate, and blink rate. Both experimental conditions were found to produce changes in response in the direction of a stress reaction, with delayed feedback producing a significantly larger change in heart rate, blink rate, and GSR, as compared with the direct feedback measures.

6005. Goldman-Eisler, Frieda. (*Maudsley Hosp., London, Eng.*) **The determinants of the rate of speech output and their mutual relations.** *J. Psychosom. Res.*, 1956, 1, 137-143.—By speech recorder and throat microphone the productions of 8 Ss were analyzed. "The overall speech rate was shown to be determined by the duration and frequency of halts and pauses interrupting the stream of speech." The speed of talking as "measured by the number of syllables per second spent in pure speech (rate of articulation) had a bearing on the overall speech rate in some cases, but not in others." It is hypothesized that "the positive correlation between the length of pauses and the speed of articulation might indicate tension, intellectual as well as emotional." These results are discussed in relation to an inhibition-excitation factor.—L. A. Pennington.

6006. Gottesman, Lillian. **The effect of literal and poetic orientations on the meaning structure of words.** *Dissertation Abstr.*, 1956, 16, 1728.—Abstract.

6007. Greenberg, Joseph H. **Essays in linguistics.** Chicago: University of Chicago Press, 1957. vii, 108 p. \$3.00.—Four of these essays fall within the general field of historical and comparative linguistics. The remaining 4 concern, respectively,

language as a sign system, the definition of linguistic units, structure and function in language, and the order of affixing as a problem in general linguistics. Several psychological hypotheses, including that of convergent and divergent hierarchies of responses, are considered as possible explanations for the fact that suffixing is more prevalent than prefixing.—J. B. Carroll.

6008. Grubb, Patti Murray. A psychophysical study of vowel formants. *Dissertation Abstr.*, 1956, 16, 1736.—Abstract.

6009. Heckman, Dayton E.; Krower, Franklin H., & Wagner, Paul H. (Ohio St. U., Columbus.) *The man behind the message; a study of some personal characteristics of professional communicators.* Columbus: The Ohio State University, 1956. iv, 132 p.—A random sample of 197 professional communicators, including college and high school teachers, clergymen, lawyers, and newspaper, radio, and TV workers, were interviewed. Interviews were also conducted with a control group consisting of 51 professional engineers. The groups were compared with respect to a wide range of personal characteristics, including cultural background, attitudes toward work, interests, political liberalism, use of mass media, and voting history. "Analysis of the data indicates that our experimental and control groups did not differ significantly in their answers to many of our questions." Findings of most interest related to comparisons among groups of communicators.—J. B. Carroll.

6010. Helson, Harry; Dworkin, Robert S., & Michels, Walter C. Quantitative denotations of common terms as a function of background. *Amer. J. Psychol.*, 1956, 69, 194-208.—Adaptation-level (AL) theory predicts that the numerical denotation of such quantitative terms as "many," "some," "few," "all," or "none" will change as a function of such background numbers as 100; 1232; 144,690; or 1,728,583. The hypothesis was tested for 26 terms in four groups of 75 Ss each. Each group was asked to indicate how many people, of a total represented by one of the above numbers, each term designated. The hypothesis was confirmed for over half the terms, the remainder maintained a denotative constancy over the range of background numbers used. Implications of the method for other semantic issues are given.—R. H. Waters.

6011. Horton, Donald, & Wohl, R. Richard. Mass communication and para-social interaction. *Psychiatry*, 1956, 19, 215-229.—Although it has been assumed that spectators, whether at sports events or viewing television programs, are passive, it is suggested that the demands made upon such audiences for particular responses should be noted. The relationship between spectator and performer, seemingly face-to-face, in mass media, radio, television and the movies, is designated as a para-social relationship. The persona, especially television performers, are discussed with reference to the illusion of intimacy projected, the responses elicited of the audience, and the conditions for audience acceptance of the role of participant and the special appeal to the lonely. These observations are intended to prompt further study of how these para-social interactions are integrated into usual social activity.—C. T. Bever.

6012. Lerea, Louis. A preliminary study of the verbal behavior of speech fright. *Speech Monogr.*, 1956, 23, 229-233.—"The subjects reported extreme nervousness during their first speaking performance and practically no speech fright in their final speech." 6 different measures of verbal behavior revealed: (1) Minimal speech fright was associated with a higher verbal output and a larger type/token ratio than was severe speech fright. (2) Non-fluencies and speaking errors were considerably more frequent when speakers experienced severe nervousness. (3) The differences between action quotient and self-reference words during the 2 speaking performances did not reach significance.—D. Lebo.

6013. Liberman, Alvin M., Delattre, Pierre C., Gerstman, Louis J., & Cooper, Franklin S. (Haskins Lab., New York.) Tempo of frequency change as a cue for distinguishing classes of speech sounds. *J. exp. Psychol.*, 1956, 52, 127-137.—Found that the tempo of the transitions was sufficient to distinguish members of the class of voiced stop consonants from corresponding members of the classes semivowels and vowels of changing color. By investigating the tempo cue with a variety of vowels, it was possible to assess the relative contributions of duration and rate of transition. The results suggest that duration is the significant aspect of the tempo cue.—J. Arbit.

6014. McPherson, Marion White. Speech behavior and egocentricity. *J. clin. Psychol.*, 1956, 12, 229-235.—"This paper reports an attempt to distinguish irregularities in speaking from other responses pre-current or current with speaking and to distinguish among various types of deviations in speaking. Analysis of recorded TAT stories indicated four different types of deviations which occurred with a decreasing frequency and had a face validity of representing an increase in egocentricity. . . . The results revealed that a deviation in speaking is most apt to be a modification or repetition of what had been said, to be one syllable in length, to involve a word without a specific referent, and to be phonetically similar to the preferred speech."—L. B. Heathers.

6015. Oliver, Robert T. *The psychology of persuasive speech.* (2nd ed.) New York: Longmans, Green & Co., 1957. xii, 466 p. \$5.00.—A textbook for students in advanced courses in speech. The first half is devoted to the psychology of persuasion, including the ethics of persuasion, motivational factors, basic techniques of persuasion, etc. This is followed by an analysis of types of persuasive speeches and advice concerning the preparation and delivery of such speeches.—J. B. Carroll.

6016. Renier, G. J. Speech communication between human beings and dogs. *Brit. J. Anim. Behav.*, 1956, 4, 79-80.—Abstract.

6017. Taylor, Richard W. Life, language, law. In Taylor, Richard W. (Ed.), *Life, language, law: Essays in honor of Arthur F. Bentley.* Yellow Springs, O.: The Antioch Press, 1957. p. 3-25.—An appraisal is made of Bentley's contribution to the attainment of linguistic reforms aimed at clarifying the confusions and fictions that prevent scientists from discerning the natural and social processes which inquiry is capable of divulging. Some criti-

cisms of Bentley's theory are presented together with some reflections on political morals.—*L. N. Solomon.*

6018. **Tewell, Fred.** *A study of the channels of communication used by one hundred Negroes in Baton Rouge, Louisiana.* *Dissertation Abstr.*, 1956, 16, 1739.—Abstract.

6019. **Webb, Wilse B.** *Elements in individual-to-individual communication.* *U. S. Naval Sch. Aviat. Med. Res. Notes*, 1956, No. NM 001 108 107, Rep. No. 4, 6 p.—An attempt is made to simulate certain common communication problems in the military setting and to evaluate certain characteristics of the communication process. Results indicate no significant differences between communicators in the amount of information communicated, though there were differences in the time required to transmit equal amounts of information. The number of questions asked by the communicatee did not relate to the amount of information communicated.—*E. G. Aiken.*

6020. **Wilson, John.** *Language and the pursuit of truth.* Cambridge, Eng.: Cambridge University Press, 1956. xii, 105 p. \$1.75.—A non-technical presentation of "semantics" and linguistic philosophy. Topics covered are: functions and types of words, mistakes about words, types of statements, the basis of meaning and verification, value statements, metaphysical statements, and prejudice.—*J. B. Carroll.*

(See also abstracts 5604, 5945)

CLINICAL PSYCHOLOGY, GUIDANCE, COUNSELING

6021. **American Personnel and Guidance Association. Committee on Professional Practices.** *1956 Directory of counseling agencies.* Washington, D. C.: APGA, 1956. 57 p. \$1.00.—A listing of 143 agencies especially concerned with vocational and educational counseling. Description of agencies includes sponsorship, nature of counseling services, type of clientele served, fees, staff, and hours.—*F. Costin.*

6022. **Berrien, F. K., & Bash, Wendell H.** *Human relations: comments and cases.* (2nd ed.) New York: Harper & Brothers, 1957. xii, 564 p. \$5.00.—This revision (see 25: 6194) keeps the form and aims of the first, which grew out of the case method initiated at the Harvard School of Business Administration. New publications have influenced the revision without being incorporated in such a way as to add to the length of the book. The joint author, from the field of sociology, has furthered the interdisciplinary formulation of the problem of human relations. The first half of the book presents concepts and principles. The second half presents 33 cases, which provide material for class work.—*H. Wunderlich.*

6023. **Biestek, Felix P.** *The casework relationship.* Chicago: Loyola University Press, 1957. ix, 149 p.—"The purpose of this book is to explain, define, and analyse the casework relationship as a whole and in its parts." Part I, discusses the essence of the casework relationship; Part II, discusses in detail these 7 principles of the casework relationship: individualization, purposeful expression of feelings, controlled emotional involvement, acceptance, the non-

judgmental attitude, client self-determination, confidentiality.—*L. B. Costin.*

6024. **Cumming, Elaine, & Cumming, John.** *Closed ranks; an experiment in mental health education.* Cambridge, Mass.: Harvard University Press for the Commonwealth Fund, 1957. xx, 192 p. \$3.50.—The study here reported was completed in 1951. It "represented a concentrated effort to change attitudes toward mental illness and the mentally ill in a single community." Techniques of data collection are described and the theoretical implications of before and after studies are discussed. The unexpected negative findings tend to suggest that "the working principles employed in mental health education may be inadequate and rest on false assumptions." Scales and interview protocols are appended. 95 references.—*H. P. David.*

6025. **Dahlstrom, W. Grant.** (*U. North Carolina, Chapel Hill.*) *Research in clinical psychology: 1955.* *J. clin. Psychol.*, 1956, 12, 222-228.—In summarizing the research in clinical psychology for 1955, the author stresses Meehl's contributions. 33-item bibliography.—*L. B. Heathers.*

6026. **Louttit, C. M.** *Clinical psychology of exceptional children.* (3rd ed.) New York: Harper, 1957. xii, 573 p. \$6.00.—The present edition (see 21: 1914) was revised by inviting younger colleagues (Harold F. Powell, Victor Goertzel, Mildred G. Goertzel, Michael M. Reece, Jack Matthews, and David H. Crowell) to contribute chapters on topics of their particular interests. Changes constituting the major revisions are: a chapter on normal development replacing an earlier one on the nature of problem behavior and the case history and chapters dealing with emotional and social deviant behavior as it pertains to anxiety replacing earlier chapters on personality and conduct problems. The separate chapter on treatment has been dropped in favor of its inclusion under the various special conditions discussed. Other topics included in the present edition are: clinical psychological testing, mental deficiency, school retardation, school subject disabilities, the gifted child, juvenile delinquency, speech and sensory defects and neurological and physical disabilities.—*N. H. Pronko.*

6027. **Mangus, A. R.** (*Ohio State U., Columbus.*) *Perspectives for social science research in mental health.* *Rur. Sociol.*, 1956, 21, 13-24.—Social scientists should make more scientific studies of mental health, especially of its etiology. Hypotheses and designs for research are suggested. 58 references.—*H. K. Moore.*

6028. **Mann, Richard D.** (*U. Michigan, Ann Arbor.*) *A critique of P. E. Meehl's Clinical versus statistical prediction.* *Behav. Sci.*, 1956, 1, 224-230.—A review of the problems discussed by Meehl (see 29: 3991) noting especially that Meehl takes issue with those writers who take the position that the clinician does the same thing as the actuary.—*J. Arbit.*

6029. **Meehl, Paul E.** *Wanted—a good cookbook.* *Amer. Psychologist.*, 1956, 11, 263-272.—The "rule-of-thumb method" for generating personality descriptions from tests involves the clinician's personal experience, skill, and creative artistry; the "cookbook method" refers to "the transition from psychometric pattern to personality description is an

automatic, mechanical, 'clerical' kind of task, proceeding by the use of explicit rules set forth in the cookbook." Data are cited indicating the superiority of the "cookbook method." Characteristics and expectations regarding this method are discussed. 15 references.—S. J. Lachman.

6030. Miller, Arthur A. (*Assoc. Family Living, Chicago, Ill.*) **The psychiatric consultant in family counseling.** *Marriage Fam. Living*, 1956, 18, 254-258.—"The nature and method of the psychiatric consultant's contribution . . . in a family counseling setting. . . The psychiatrist can be of service . . . in clarification of diagnosis . . . of the behavioral disturbances resulting from organic disease . . . chronic neuroses and character disorders. . . The psychiatrist, in turn, can profit by what the counselor has to offer as regards the social, cultural and group emphasis characteristic of family centered counseling."—M. M. Gillet.

6031. Mitchell, Celia Brody. (*Jewish Fam. Serv., New York.*) **The place of counseling in a family agency.** *J. Jewish communal Serv.*, 1956, 32, 356-367.—The author discusses some basic counseling hypotheses on her own experiences and information derived from psychiatric consultants and the literature of counseling.—M. A. Seidenfeld.

6032. New York (City). Community Council of Greater New York, Inc. Committee on Information Services. **Directory of social and health agencies of New York City, 1956-1957.** New York: Columbia University Press, 1956. xi, 628 p. \$7.50.—This directory provides information about governmental and voluntary welfare and health agencies serving New York City. Civic, educational and religious organizations offering services in the field of social welfare and closely related fields are included. Agencies are listed according to function and alphabetically. Names of individuals appear in a personnel index. A separate section lists information and referral centers of 37 localities of the U. S. and Canada. A list of directories of use to social workers is included.

6033. Osterman, Esther E. (*Jewish Soc. Serv. Agency, Washington, D. C.*) **Differentials in marital counseling.** *J. Jewish communal Serv.*, 1956, 32, 388-396.—While a variety of problems are found in those seeking marriage counseling, the central theme is focussed on the "belief in the positive value of marriage for people who want to hold on to and improve the relationship." The counselor's role is to aid the clients achieve increased satisfaction especially in the marital relationship. The general goals are essentially the same as in all counseling. Several case histories are included to clarify the counselor's approach to varying types of marital problems.—M. A. Seidenfeld.

6034. Perlman, Helen Harris. (*U. Chicago, Ill.*) **Social casework; a problem-solving process.** Chicago: University of Chicago Press, 1957. xiii, 268 p. \$5.00.—The thesis of this book is that the common core of all casework is problem-solving, and these problem-solving operations are congruent with those of the normal person. Part I (7 chapters) deals with those dynamic components which the casework situation consists of. The emphasis is on the "helping process." Part II (5 chapters) offers a cross-section

of casework in which the components discussed in Part I can be viewed in interaction. This cross-section concentrates on the beginning phase of case work. A final chapter consists of two cases illustrating the problem-solving process. Annotated chapter bibliographies.—L. B. Costin.

6035. Strother, Charles R. (Ed.) **Psychology and mental health; a report of the Institute on Education and Training for Psychological Contributions to Mental Health, held at Stanford University in August, 1955.** Washington, D. C.: American Psychological Association, 1956. v, 156 p. \$1.75.—Includes the keynote address on The role of psychology in the mental health effort by Robert H. Felix; The training needs of psychologists in community mental health programs at state and local levels by Jerry W. Carter, Jr.; The problem of specialization in training by Victor C. Raimy; The improvement of practicum training and facilities by David Shakow; Training individuals to engage in the therapeutic process by Carl R. Rogers; Training for research in the mental health field by Eliot H. Rodnick; Problems of departmental organization for an extended mental health program by Neil D. Warren, together with an introduction and summary by the editor.—N. H. Pronko.

6036. Taylor, Joseph L. (*Jewish Fam. Service, St. Paul, Minn.*) **Psychiatric consultation in family counseling.** *Marriage Fam. Living*, 1956, 18, 259-262.—The problem "of the client" is not always completely "confined within the counselor's special area." These are the cases for which the counselor needs psychiatric consultation in order to understand "his client" completely.—M. M. Gillet.

6037. Wirt, Robert D. **Actuarial prediction.** *J. consult. Psychol.*, 1956, 20, 123-124.—19 patients were selected who were rated as "the most greatly improved as a result of a short period of psychotherapy" and matched with a group of 19 patients who were rated as unimproved. The MMPI profiles for these 38 patients were given to 8 judges; it was found that "only one judge exceeded chance at an acceptable level of statistical confidence." Using Barron's ego-strength scale (*Es*) it was found that the correct judgments numbered 30, suggesting that "in this situation the use of mechanical sorting clearly beats clinical prediction."—A. J. Bachrach.

(See also abstract 5407)

METHODOLOGY, TECHNIQUES

6038. Barber, Theodore Xenophon. (*American U., Washington, D. C.*) **Comparison of suggestibility during "light sleep" and hypnosis.** *Science*, 1956, 124, 405.—7 standard tests of suggestibility were given to each of 22 subjects during the middle of the night while they were sleeping in their own rooms. 3 subjects woke; 7 either moved or opened their eyes for a moment. The remaining 12 subjects seemed to be lightly sleeping and responded to the 7 tests of suggestibility as if they were in some stage of hypnosis. The same 7 tests of suggestibility were given after a standard hypnotic-induction procedure and to the subjects when they were normally awake.—S. J. Lachman.

6039. Bellak, Leopold, & Smith, M. Brewster. **An experimental exploration of the psychoanalytic**

process: exemplification of a method. *Psychoanal. Quart.*, 1956, 25, 385-414.—". . . A study was conducted in which patients' sessions were recorded for several months. Two analysts were asked to predict the patients' behavior, and two analysts were asked to judge his behavior independently, with reference to the same set of variables, with a number of experimental precautions. The ratings were made quantitatively and qualitatively. The quantitative results show a high degree of agreement . . . among the judges themselves, and among the predictors themselves. A high degree of agreement also exists between predictors and judges. These results indicate that all the participants were well able to agree on the nature of the case. The ability to agree on the nature of short-range changes was not unequivocally demonstrated."—L. N. Solomon.

6040. Bendig, A. W. (U. Pittsburgh, Pa.) **Reliability of case history ratings and intellectual ability of graduate raters.** *J. consult. Psychol.*, 1956, 20, 142-144.—"Graduate students in psychology ($N = 40$) rated ten abstracted clinical case histories for global adjustment level using a seven-point rating scale. The raters were then dichotomized on the basis of their scores on graduate school entrance tests, the number of earned graduate credits in psychology, and their expressed interest in clinical psychology. . . . None of the intellectual, educational, or interest variables were related to rater reliability, but raters high on the Miller Analogies Test and with a greater number of earned graduate credits showed significantly (.01 level) greater rater bias."—A. J. Bachrach.

6041. Blumenthal, Erik. **Schulschriften der verschiedenen Länder.** (Schoolwritings of different countries.) Stuttgart, Germany: Hans Huber, 1957. 116 p. DM 13.20.—The samples of schoolwritings of 47 countries using the Latin alphabet are presented, compared and various specific characteristics discussed. The book is intended as an aid to professionals dealing with handwriting analysis, such as: school administrators, teachers, handwriting experts and psychologists.—V. J. Bieliasskas.

6042. Brodsky, Rose. (Jewish Commun. Serv. Long Island, New York.) **Varying procedures in marriage counseling.** *J. Jewish communal Serv.*, 1956, 32, 397-405.—In the Jewish Community Service of Long Island, a specific department concerned with marital problems has developed. Based upon her experience, Brodsky discusses a number of the elements in the marital relationship that need consideration in marriage counseling. Among these are compatibility, ability to act with maturity and accept responsibility of the marital status, adaptable sex conduct, and a number of others. In this agency, cases referred for marital counseling are developed around the husband and wife who both ultimately participate in a sustained series of individual and appropriate joint interviews with a view toward a more satisfying marriage. Each pair of counselees is helped toward the solution of their own individual problem by aiding them to face it and become aware of what relation it has to the total marital situation. The methodological approach leading to improved medical counseling is discussed.—M. A. Seidenfeld.

6043. Deutsch, Danica. **A step toward successful marriage.** *Amer. J. indiv. Psychol.*, 1956, 12, 78-

83.—An account of marital counseling as conducted in the Alfred Adler Consultation Center.—A. R. Howard.

6044. Fox, William M. (U. Florida, Gainesville.) **For non-directive interviewing you must know yourself.** *Personnel J.*, 1956, 35, 98-99.—The non-directive interview may be used for the selection, grievance or counseling interview. The interviewer, however, must feel secure and know his own weak spots before he can listen with "detachment from self."—M. B. Mitchell.

6045. Leichter, Elsa. (Jewish Fam. Serv., New York.) **Family casework through the group method.** *J. Jewish communal Serv.*, 1956, 32, 376-387.—A presentation of "a case illustration of group counseling in the family agency."—M. A. Seidenfeld.

6046. Phillips, Helen U. (U. Pennsylvania School of Social Work.) **Essentials of social group work skill.** New York: Association Press, 1957. x, 180 p. \$3.50.—Written from the functional or Rankian frame of reference, this text analyzes and describes the components of the skill of the professionally trained social group worker. These are: skill in using agency function, skill in communication of feeling, skill in using the reality of the present, and skill in stimulating and using group relations. It is the last which uniquely distinguishes the skills of the social group worker from other professionals within social work. "The capacity to translate values into professional efforts that precipitate movement toward the fulfillment of purpose constitutes social group work skill."—D. D. Raylesberg.

6047. Poffenberger, Thomas M. (U. California, Davis.) **A technique for evaluating family life and mental health films.** *Marriage Fam. Living*, 1956, 18, 219-223.—"The intention of the present study was to develop a method . . . for film evaluation" including "the effect of scenes in terms of disturbance or help with problems."—M. M. Gillet.

6048. Ruesch, Jurgen. **Disturbed communication; the clinical assessment of normal and pathological communicative behavior.** New York: W. W. Norton, 1957. viii, 337 p. \$6.00.—Provides a means of observing the communication activities of individuals alone, in 2-person systems and in groups. Part I is concerned with the nature of communication pathology in such terms as the genesis of disturbed communication and individual psychopathology. Part II is devoted to an analysis of the clinical observation of communicative behavior, including hypothetical constructs and empirical notions regarding communicative behavior. A major portion of Part II is given to a guide to clinical observation of behavior in communication, a check list designed to provide a systematic method of observing and recording such behavior. Specific examples of normal and disturbed communicative behavior are presented and discussed. 266 references.—A. J. Bachrach.

6049. Shontz, Franklin C. (Western Reserve U., Cleveland, Ohio.) **Evaluative conceptualizations as the basis for clinical judgments.** *J. consult. Psychol.*, 1956, 20, 223-226.—"A Q-sort investigation was made of twelve psychologists' conceptualizations of the psychologically healthy person and the ideal hospitalized patient. Equivalent Q-sort forms were used to establish intrasubject reliabilities,

and these were found to be .80 and .82 respectively for the two conceptualizations. Average intersubject agreements were found to be .68 for the psychologically healthy person descriptions, and .59 for the descriptions of the ideal hospitalized patient. The values were interpreted as indicating a high level of general agreement between subjects, but by no means as expressive of a unity of opinion on all specific trait items."—A. J. Bachrach.

6050. Vidich, Arthur J. (U. Puerto Rico, Rio Piedras.) **Methodological problems in the observation of husband-wife interaction.** *Marriage Fam. Living*, 1956, 18, 234-239.—"The general tone of the interviews was one of conciliation and moderation . . . in an effort to create a favorable impression. . . . The application of standard methods [therefore] can seriously distort the data's meaning and implication."—M. M. Gillet.

6051. Webb, Wilse B. **A procedure for obtaining self-ratings and group ratings.** *J. consult. Psychol.*, 1956, 20, 233-236.—The rating procedure in which individuals in a Navy preflight training program were asked to rate themselves in terms of the group was given the title "SPM Procedure," the initials standing for "self-plus-minus." Each man in the group was asked to rate himself in comparison with every other man in the group. The SPM was found to be a reliable measure for self-rating and group-rating.—A. J. Bachrach.

6052. Wiener, Morton; Carpenter, Bruce, & Carpenter, Janeth T. (Central State Hosp., Indianapolis, Ind.) **Determination of defense mechanisms for conflict areas from verbal material.** *J. consult. Psychol.*, 1956, 20, 215-219.—"An attempt was made to devise a technique which would permit specification of kinds of defense mechanisms used by individuals in various areas of conflict. Scoring criteria were developed to aid in identifying repressive and sensitizing responses to a sentence completion task. Judges were able to classify Ss reliably by use of the scoring criteria. Converting judges' classifications to a single score variable allowed comparison of defense mechanisms used in several conflict areas. In general a theory of consistency of defense behavior was not supported."—A. J. Bachrach.

DIAGNOSIS & EVALUATION

6053. Altus, Grace T. **Some correlates of the Davis-Eells Tests.** *J. consult. Psychol.*, 1956, 20, 227-232.—"A group of 184 fourth grade children, reasonably representative of fourth-graders in terms of age and measured intelligence, were given a battery of tests including the Davis-Eells Games, the California Test of Mental Maturity, and the California Tests of Reading and Arithmetic. Interrelationships among the tests were investigated, with special reference to the performance of bilingual children and those from varying social-class levels." The author believes in view of this study that the use of the "test in elementary schools at present except as a research instrument does not appear to be warranted."—A. J. Bachrach.

6054. Amatora, Mary. (Saint Francis Coll., Ft. Wayne, Ind.) **Validity in self evaluation.** *Educ. psychol. Measmt.*, 1956, 16, 119-126.—Amatora's Child Personality Scale was given to 200 boys and

200 girls in grades 4 through 8. Pearsonian *r*'s were computed between self-evaluations and peer evaluations on the 22 separate scales for boys and girls separately. Only 5 of the 44 *r*'s were not significant at the 5% level; 31 of the *r*'s were significant at the 1% level. The problem of establishing validity for self-rating scales is discussed at some length. 24 references.—W. Coleman.

6055. Arnhoff, Franklyn N., Strough, La Vern C., & Seymour, Richard B. **The Cornell Medical Index in a psychiatric outpatient clinic.** *J. clin. Psychol.*, 1956, 12, 263-268.—"The Cornell Medical Index . . . was given to 45 male and 56 female psychiatric outpatients, with the two sex groups equated for age, education and type of illness, as well as approximate socio-economic background. Analyses revealed few sex differences on the medical scales and none on the psychiatric scales. Most significant of the findings was the very frequent complaint of fatigability for both sexes, as well as significantly more complaints by the female patients of tumor or cancer and kidney or bladder disease, despite the absence of physical findings. Various criteria for use of the C.M.I. . . . were statistically examined and were not found valid. . . ."—L. B. Heathers.

6056. Becker, Horst. **Ein Testprofil zum Rohrschach-Test.** (A test profile for the Rohrschach-test.) *Psychol. Rdsch.*, 1956, 7, 26-30.—To simplify the evaluation of the Rohrschach-test a graph has been developed. A scale for each factor is based upon the distribution of the symptoms. The actual responses are marked on the appropriate scale, thus allowing the drawing of a profile and a quicker evaluation of the types.—W. J. Koppitz.

6057. Belleville, Richard E. (USPHS Hosp., Lexington, Ky.) **MMPI score changes induced by lysergic acid diethylamide (LSD-25).** *J. clin. Psychol.*, 1956, 12, 279-282.—"Twenty-four former narcotic addicts were given the MMPI under control, placebo, and LSD conditions. Analysis of variance showed significant differences in T-scores between control and LSD conditions and between placebo and LSD conditions on the Pa, Pt, Sc and A scales. No significant placebo effects were found. The conclusion was drawn that the MMPI is sensitive to some of the major psychological changes produced by LSD-25, and the suggestion was made that this inventory could find wider use in clinical situations in which drugs are employed."—L. B. Heathers.

6058. Boeke, P. E. **Ervaringen met de Grassi-Test.** (Some experiences with the Grassi Test.) *Ned. Tijdschr. Psychol.*, 1956, 11, 433-446.—Results of a study of 95 protocols of the Grassi-Test in comparison with the clinical diagnosis of psychiatric patients indicate that there is no significant difference between test results of non-organic patients and those with epileptic disturbances, but significant differences were found between non-epileptic organic patients and a non-organic group. The intelligence level of the subjects was found to influence test scores, which did not differentiate above an I.Q. of 110.—R. H. Howwink.

6059. Boisbourdin, Ch., de Brisson de Laroche, A., Michel, A., & Peltier, J. R. **Expérimentation du Test P. F. de Rosenzweig sur un groupe d'élèves pilotes de l'Armée de l'Air.** (Experimenta-

tion with the Rosenzweig P. F. Test on a group of Air Army student pilots.) *Rev. Psychol. appl.*, 1956, 6, 15-27.—The French adaptation of the Rosenzweig Picture-Frustration Test was administered to 173 student pilots in 1953. In 1955 the results were compared for the 103 who had become pilots and the 70 who had been eliminated in training in the U.S.A. No significant differences appeared in the regular mode of response categories. However, differences did appear in passive responses, group conformity rating, and absences of any responses in I' and e.—*W. W. Wattenberg*.

6060. Breiger, Boris. (Chicago State Hosp., Ill.) **The use of the W-B picture arrangement subtest as a projective technique.** *J. consult. Psychol.*, 1956, 20, 132.—Brief report.

6061. Brengelmann, Johannes C. **Conrads Standardwahrscheinlichkeit in der Farbwahl: Eine Entgegnung.** (A reply to Conrad's standard solution of color choice according to probability.) *Z. exp. angewand. Psychol.*, 1955-56, 3, 602-604.—The solution of the color pyramid test by abnormal subjects is characterized according to Conrad's experience by an approach to the solution that can be expected from a probability distribution of the color stimuli. This hypothesis cannot be confirmed by the author; evidence against it is discussed. English and French summaries.—*W. J. Koppitz*.

6062. Campbell, Donald T. (Northwestern U., Evanston, Ill.), & Burwen, Leroy S. **Trait judgments from photographs as a projective device.** *J. clin. Psychol.*, 1956, 12, 215-221.—"This study reports on several analyses of the responses of various groups of Air Force personnel to a test requiring that fifty persons presented in photographs be described in personality terms. . . . Analysis of variance . . . while inconsistent in outcome, supports the hypothesis of consistent individual differences in response to specific Age and Sex categories of photographs. . . . However, intercorrelation of scores from the ten specific age-sex categories provides inconsistent support for age as a dimension of stimulus similarity. Sex is a significant source of stimulus similarity for the women respondents, but not for any of the male groups. These findings are thought to be quite out of keeping with the common assumptions of psychologists in utilizing such tests."—*L. B. Heathers*.

6063. Castenada, Alfred; McCandless, Boyd R., & Palermo, David S. **The children's form of the manifest anxiety scale.** *Child Developm.*, 1956, 27, 317-326.—"The present study reports the description of, and the normative data obtained with, a scale of manifest anxiety adapted from Taylor's adult form for use with fourth, fifth and sixth grade children." 42 references.—*L. S. Baker*.

6064. Cattell, Raymond B. (U. Illinois, Urbana.) **Validation and intensification of the Sixteen Personality Factor Questionnaire.** *J. clin. Psychol.*, 1956, 12, 205-214.—"This paper is an account of the concepts, methods and results in producing a revision of the 16 P.F. Questionnaire. . . . The term 'validation' . . . applies to determining the personality factor validity . . . while the term 'intensification' is . . . the special, additional process of raising the saturation of items on required factors and reducing irrelevant correlations. . . ." 44 references.—*L. B. Heathers*.

6065. Clyde, Robin James. **An investigation of the construct validity of some Rorschach variables.** *Dissertation Abstr.*, 1956, 16, 1501-1502.—Abstract.

6066. Coan, Richard. (U. Illinois, Urbana.) **A factor analysis of Rorschach determinants.** *J. proj. Tech.*, 1956, 20, 280-287.—The writer reviews other factor analytic studies of the Rorschach and discusses the theoretical and methodological problems of Rorschach scoring, with emphasis on the problem of the interdependence of various Rorschach scores, especially as related to R, the number of responses. The writer factor analyzed only the determinants of the Rorschachs of 92 Yale undergraduates. Seven factors were extracted from a matrix of 12 Rorschach determinants. Rotation to simple structure was approximated. A distinct productivity factor, such as has appeared in all previous factor analyses of the Rorschach, was not evident. An attempt is made to interpret the factors in Rorschach terms.—*A. R. Jensen*.

6067. Coombs, Clyde H., Milholland, J. E., & Womer, F. B. (U. Michigan, Ann Arbor.) **The assessment of partial knowledge.** *Educ. psychol. Measmt.*, 1956, 16, 13-37.—"(1) Clear evidence for the existence of partial information mediating responses to multiple choice items was obtained, and some of the implications of the conventional correction for chance formula investigated. (2) On the average, the experimental response method increased the reliability of the tests to a degree equivalent to a 20 per cent increase in the test's effective length. The effect on reliability, however, is clearly dependent on the difficulty of the test, the reliability being increased more for more difficult tests. (3) A test administered by the experimental method appears to measure the same complex of abilities as it does when administered by the conventional method."—*W. Coleman*.

6068. Crandall, Vaughn J. **Observations on the use of projective techniques in child development research.** *J. proj. Tech.*, 1956, 20, 251-255.—Several methodological problems intrinsic to the use of projective tests in the area of child development research, and the advantages and limitations of various projective media as research tools in this area are discussed. The specific problems considered are those of (1) the categorization of responses, (2) the independent assessment of behavior and personality. Examples of these problems in recent research are described along with proposed solutions.—*A. R. Jensen*.

6069. Cutts, Richard A. (Div. Exceptional Children, Jacksonville, Ill.) **A projective interview technique.** *Amer. J. ment. Defic.*, 1956, 61, 191-197.—A projective method found useful in the clinical evaluation of mentally retarded children is described.—*V. M. Staudt*.

6070. Dauber, Moshe, & Alon, Shoshana. **Nisuy b'Rorschach m'kutsar.** (Experiment in shortened Rorschach.) *Hahinukh*, 1955/56, 28, 283-285.—An experiment following a paper of Mirai in Rorschachiana. There were examined 121 elementary school leavers, boys and girls of the 8th grade, from Oriental and European countries, normal (102) and backward (19) children. The indications were compared with evaluations given by the class educators. The results are: (1) Shortened Rorschach cannot be

administered instead of the full Rorschach, when we are interested in a full diagnosis of the personality. (2) It seems that this technique enables to identify normal adjustment or maladjustment both of an individual and a group.—H. Ormian.

6071. **Daids, Anthony.** (*Brown U., Providence, R. I.*) **The influence of ego-involvement on relations between authoritarianism and intolerance of ambiguity.** *J. consult. Psychol.*, 1956, 20, 179-184.—"Twenty-two male undergraduates underwent a battery of tests and personnel assessment procedures under the assumption that the results would be used in selecting someone for a highly desirable job. These Ss were registered at the student employment office, were in need of work, and were eager to pass the psychological screening. Thus, it seems warranted to conclude that the assessment conditions were seen as formal, somewhat threatening, and highly ego-involving." A significant negative correlation was found to exist "between authoritarianism and intelligence as measured by academic achievement." 20 references.—A. J. Bachrach.

6072. **Davis, Paul C.** (*U. S. Calif., Los Angeles.*) **A factor analysis of the Wechsler-Bellevue scale.** *Educ. psychol. Measmt.*, 1956, 16, 127-146.—To determine the factor content of the Wechsler-Bellevue, it was administered to 202 eighth grade students along with 7 reference tests. Thurstone's complete centroid method was employed to extract 11 factors. These were verbal comprehension, visualization, numerical facility, mechanical knowledge, doublet, general reasoning, fluency, perceptual speed, education of conceptual relations, and information. All subtests of the Wechsler-Bellevue scale were found to be complex in their factorial composition. Other findings are also reported. 33 references.—W. Coleman.

6073. **Dirks, Heinz.** **Test oder Ausdruck? Über die Probleme und Grundlagen der praktisch-psychologischen Diagnostik.** (Test or expression? On the problems and bases of practical psychological diagnosis.) *Psychol. Rdsch.*, 1954, 5, 196-205.—Both procedures, test and expressive methods, have their scientific bases, values, and limitations. Misuse cannot be prevented and can occur with both procedures. If we want to advance we have to know more about human behavior. Although our tools are good we have to refine them and have to apply both test and expressive method.—M. J. Stanford.

6074. **Dunn, S. S.** **A critical survey of methods of computing and using I.Qs.** *Brit. J. educ. Psychol.*, 1956, 26, 137-140.—Whether the I.Q. is conceived in the classical sense as a ratio score, or alternatively as a standard score or a normalized standard score, difficulties are essentially involved in the concept, and much confusion results from employing the same term with different meanings. The tendency to think of the I.Q. as describing absolute properties is a further source of error. A more satisfactory method of expressing relative brightness is the percentile rank within a well-defined group.—R. C. Strassburger.

6075. **Fiedler, Miriam Forster, & Stone, L. Joseph.** **The Rorschachs of selected groups of children in comparison with published norms: I. The effect of mild hearing defects on Rorschach performance. II. The effect of socio-economic**

status on Rorschach performance. *J. proj. Tech.*, 1956, 20, 273-279.—In the first study 10 matched pairs of children, with and without hearing defects, were used for the analysis of the Rorschach characteristics of children with defective hearing. It was concluded that "no single Rorschach factor or pattern of factors, on the basis either of scoring or interpretative analysis, could be found which would consistently differentiate the children with defective hearing from the children with normal hearing. In the second study the Rorschachs of 33 children of low socio-economic status were compared with published norms. Rorschach differences between different socio-economic groups led the authors to suggest that "we must obtain appropriate norms for children of various socio-economic levels."—A. R. Jensen.

6076. **Fordyce, Wilbert E.** (*VA Hosp., Seattle, Wash.*) **Social desirability in the MMPI.** *J. consult. Psychol.*, 1956, 20, 171-175.—A scale of social desirability (S-D) was constructed from the MMPI. It was found that the S-D scale correlated significantly with the F and K validity scales, as well as the 9 clinical scales of the MMPI. The fact that the S-D correlated highly with F and K and "higher with each of them than they do with each other" suggested that "a common factor underlies the three and that S-D is a better estimate of this factor." It was also concluded that "a common factor underlies many of the clinical scales, particularly Pa, Pt, and Sc, and that it may be characterized as social desirability." One other conclusion was that "test-taking attitudes toward the MMPI can be characterized as readiness or lack of readiness to respond to socially desirable items."—A. J. Bachrach.

6077. **Foulds, G. A.** (*Runwell Hosp., Wickford, Essex, Eng.*) **Distraction and affective disturbance.** *J. clin. Psychol.*, 1956, 12, 291-292.—Modified Porteus Mazes—blinds eliminated—were given to 30 depressed patients with and without distraction. Under distraction conditions S had to repeat numbers said by E. The mazes were administered four times at one sitting with two control and two distraction periods arranged in a counterbalanced order. On the first three administrations, the distracted group worked significantly faster than the non-distracted.—L. B. Heathers.

6078. **Franks, C. M.** (*Maudsley Hospital, London, Eng.*) **L'Echelle de Taylor et l'analyse dimensionnelle de l'anxiété.** (The Taylor Scale and the dimensional analysis of anxiety.) *Rev. Psychol. appl.*, 1956, 6, 35-44.—A group of 20 normal adults and 40 neurotics was given a 50-item version of Taylor Manifest Anxiety Scale, the Guilford personality scale, and the Maudsley Medical Questionnaire. The Guilford D (depression) plus C (cycloid disposition), the MMQ and the Taylor yielded high correlations (.86 to .92). The Guilford R scale (Rhythmic) had moderate negative correlations with the other three. This can be accounted for if one assumes with Eysenck that the dimension of neuroticism is orthogonal to that of introversion-extra-version. 26-item bibliography.—W. W. Wattenberg.

6079. **Freeman, John G.** (*State Hosp., Jamestown, N. D.*), & **Lucero, Rubel J.** **F-L Fergus Falls lobotomy scale.** *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 30-32.—This is a description of the items, scoring procedures, and validation of a scale

devised to select patients who are most likely to improve following lobotomy. The prognostic aspect of this scale is illustrated by a brief case report.—L. A. Pennington.

6080. Fricke, Benno G. (U. Michigan, Ann Arbor.) **Response set as a suppressor variable in the OAIS and MMPI.** *J. consult. Psychol.*, 1956, 20, 161-169.—A method for constructing a scale to measure a test taker's set to say "true" to personality test items was described. The Set T scale of the Opinion, Attitude, and Interest Survey (OAIS) was used to show how response set could be harnessed to function as a suppressor variable and improve the validity of 2 empirically validated grade-predictor scales. The marked structural and functional similarity of Set T of the OAIS and K of the MMPI was drawn upon to challenge the traditional interpretation of the K scale. Some evidence was assembled which indicates that some of the MMPI scales are not optimally K-corrected. 26 references.—A. J. Bachrach.

6081. Furst, Edward J., & Fricke, Benno G. (U. Michigan, Ann Arbor.) **Development and applications of structured tests of personality.** *Rev. educ. Res.*, 1956, 26, 26-55.—During the past 3 years, there was a relative and absolute increase in the construction and use of personality inventories, with emphasis continuing to shift from measuring such traits as "dominance" or "introversion-extraversion" to the measurement and prediction of socially significant behavior, particularly in delinquency. The 219 studies of this period are considered under the categories of general reviews and discussions, new inventories (Minnesota Teacher Attitude Inventory, Lee-Thorpe Occupational Interest Inventory), new scales for existing inventories, characteristics and value of various types of items, distortion of responses, pattern analysis, configural scoring, data on reliability and comparability, studies of validity, and miscellaneous studies. The authors conclude with several suggestions for later research.—W. W. Brickman.

6082. Gehman, Ila H. (State Hosp., Butner, N. C.), & Matyas, Rudolph P. **Stability of the WISC and Binet Tests.** *J. consult. Psychol.*, 1956, 20, 150-152.—"Results of Binet and WISC administrations were compared, these tests having been given to 60 boys and girls in fifth grade and four years later to the same children in ninth grade. Both tests yielded IQ's that were relatively constant and showed equal stability over this interval of time."—A. J. Bachrach.

6083. Gold, Donald Lee. **The effect of negative instructions on Rorschach symbolization.** *Dissertation Abstr.*, 1956, 16, 1281-1282.—Abstract.

6084. Gordon, Leonard V., & Stapleton, Ernest S. **Fakability of a forced-choice personality test under realistic high school employment conditions.** *J. appl. Psychol.*, 1956, 40, 258-262.—The Gordon Personal Profile was administered to junior and senior high school students for vocational guidance purposes. Three months later it was readministered as an employment test to students applying for jobs. Those not seeking jobs took the test again as a guidance test. . . . Individuals did not change their profile patterns substantially from a guidance situation to an employment situation, and mean increases for the group were found to be moderate."—P. Ash.

6085. Grayson, Harry M. (V.A. Neuropsychiatric Hosp., Los Angeles, Calif.) **Rorschach productivity and card preferences as influenced by experimental variation of color and shading.** *J. proj. Tech.*, 1956, 20, 288-296.—The author has devised ten different Rorschach sets (100 cards in all) in which are included: the original Rorschach, 3 achromatic sets differing in blackness-intensity, and 6 monochromatic sets running the rainbow gamut from blue through red. These sets were used on normal nurses. It was found that productivity is independent of color and shading, is influenced by card design and even more by design-color interaction. There is no relationship between card preference and productivity.—A. R. Jensen.

6086. Gwynne Jones, H. (Maudsley Hospital, London, Eng.) **Comments on "The validity and interchangeability of Terman-Merrill and Matrices Test data" by D. Walton.** *Brit. J. educ. Psychol.*, 1956, 26, 141.—Walton's contention that Matrices scores are not convertible to I.Q. equivalents is questioned. This is justifiable where the derived I.Q. represents a standard score on a normalized distribution, and is methodologically equivalent to a Wechsler I.Q. By correcting Binet I.Q.s for deviations from the theoretical distribution, they can be directly compared with scores on other tests. Comments by D. Walton, pp. 142-143.—R. C. Strassburger.

6087. Haase, William. **Rorschach diagnosis, socio-economic class, and examiner bias.** *Dissertation Abstr.*, 1956, 16, 1283.—Abstract.

6088. Hunt, William A. (Northwestern U., Evanston, Ill.), & Arnhoff, Franklyn N. **The repeat reliability of clinical judgments of test responses.** *J. clin. Psychol.*, 1956, 12, 289-290.—In a previous study (see 30: 3212) 16 Chicago clinical psychologists rated W-B Voc and Comp items for schizophrenic quality. Three and 18 months later they were requested to rerate the items. A nation wide group of 16 clinical psychologists was also requested to rate the items. The mean rating of the two groups on the items agreed closely. With the three month interval, only two of the original group of raters had test-retest r's below .70; nine had r's of .80 or above on both subtests.—L. B. Heathers.

6089. Jones, Marshall B. **Aspects of the autonomous personality: VII. The Pensacola Z survey.** *USN Sch. Aviat. Med., Res. Rep.*, 1956, No. NM 001 108 109, Rep. No. 6, iii, 12, A-18 p.—The 4-item clusters in the Pensacola Z scale were expanded into 4 corresponding 40-item scales. The homogeneity levels of the 4 scales range between .82 and .90. The 24-hour retest coefficients range between .83 and .89. All 4 scales are fakable. The directions in which the 4 scales are faked divide them into a conformist pair, Dependency and Rigidity, and a non-conformist pair, Anxiety and Hostility. The 2 non-conformist scales correlate negatively with the 2 conformist scales. These 4 scales together with the original Z Scale were built into a single inventory, the Pensacola Z Survey.

6090. Jones, Richard M. (Harvard Psychological Clinic, Cambridge, Mass.) **The negation TAT; a projective method for eliciting repressed thought content.** *J. proj. Tech.*, 1956, 20, 297-303.—This research attempts to evaluate systematically the clinical

validity of evoked negative associations to the TAT. After the entire standard set of stories is collected the subject is asked to make up the most *unlikely* story that came to mind for each picture. Blind comparative ratings of each pair of stories (standard instructions and negative instructions) were made by each patient's own therapist answering the question: "Which story of each pair more lucidly suggests this patient's repressed psychic content as you know it?" "In 46 of 55 pairs of stories the negation story was rated more lucidly suggestive of repressed psychic content." Examples are presented.—A. R. Jensen.

6091. Jost, Hudson (U. Georgia, Athens.), & Epstein, Leon J. The Rorschach as a physiological stress. *J. clin. Psychol.*, 1956, 12, 259-263.—"Simultaneous measurements of respiration, heart rate, relative blood pressure change and galvanic skin resistance levels and responses were obtained during the free association portion of the Rorschach examination on 32 nonclinical subjects consisting of medical and nursing students. The findings indicate that the Rorschach examination is a stressful one as reflected in the physiological changes associated with its administration. The subjects showed a marked increase in the reactivity as reflected in the measurements with Cards I and II and then a gradual adjustment through Card X. None of the cards seemed to have specific exciting value for this group."—L. B. Heathers.

6092. Kahn, T. C. Kahn Test of Symbol Arrangement: administration and scoring. *Percept. Mot. Skills*, 1956, 6, 299-334. (Monogr. Suppl. No. 4.)—A description of a new projective technique and its administration and scoring is presented. Testee manipulates a set of plastic objects in several ways. Responses are evaluated in terms of the meanings of the objects for the testee.—C. H. Ammons.

6093. Kaplan, Bert, & Berger, Stanley. Increments and consistency of performance in four repeated Rorschach administrations. *J. proj. Tech.*, 1956, 20, 304-309.—Using the instructions to report only new and different responses at each administration, the group Rorschach was given 4 times to 28 college students. Productivity (R) fell off about a third on the second administration, but maintained itself at the same level on the third and fourth. The basic shape of the psychogram showed relatively little stability. "... these results suggest that a certain degree of caution is appropriate in interpreting a single Rorschach performance."—A. R. Jensen.

6094. Karl, Helmut. (U. Freiburg, Germany.) Die Methodik des Mittelprotokolls im Farbpyramiden-Test. (Methodology for the middle protocol in the Color Pyramid Test.) *Z. diagnost. Psychol.*, 1956, 4, 123-145.—This is a continuation of a previous preliminary paper (see 30: 2884) dealing with a revision of the Color Pyramid Test. A theoretical rationale and experimental data are presented, suggesting that "pleasant" and "unpleasant" pyramids be combined into a single CPT scoring system. Further research is in progress. English and French summaries.—H. P. David.

6095. Karson, Samuel; Pool, Kenneth B., & Freud, Sheldon L. The effects of scale and practice on test scores of the Wechsler Adult Intelligence Scale and the Wechsler-Bellevue Intelligence Scale, Form I. *USAF Sch. Aviat. Med. Rep.*,

1957, No. 57-39, 5 p.—Practice effects were found, regardless of the scale administered first, on all of the verbal and performance subtests and on the Verbal IQ, Performance IQ, and Full Scale IQ. Scale by practice interaction revealed significant variation only for information. The findings of this study indicate that W-B I is not a satisfactory alternate for the WAIS and that there exists a strong need for an alternate form of the WAIS.

6096. Kass, Walter. (Menninger Found., Topeka, Kans.) Projective techniques as research tools in studies of normal personality development. *J. proj. Tech.*, 1956, 20, 269-272.—The writer discusses the three papers in this symposium (see 31: 6068, 31: 6122, 31: 6131) with reference to child development research pursued at the Menninger Foundation, in which projective techniques have been used. The writer warns against the use of projective techniques for the assessment of variables which are more easily assessed by other, more direct means.—A. R. Jensen.

6097. Klein, Armin, Jr. The influence of stimulus material and geographical region on responses to a thematic test. *Dissertation Abstr.*, 1956, 16, 1284-1285.—Abstract.

6098. Knehr, C. A. (Cornell U., Ithaca, N. Y.) Progressive matrices findings associated with cerebral histopathology. *Percept. Mot. Skills*, 1956, 6, 249-254.—A diagnostic indicator of histopathologic factors in intellectual impairment has been described. It is to be found in the differential between obtained scores on Sets A, B, C, D, and E, of the Progressive Matrices and the normally expected scores based on the performance of Set A. The indicator is observed to be a significantly lower than expected score on Set B. Where impairment is moderate, a reversion to expected performance levels occurs in later sets. In 21 of 33 patients with known cerebral histopathologic changes, this score reversal was found.—C. H. Ammons.

6099. Knopf, Irwin J. (State U. Iowa, Iowa City.) Rorschach summary scores in differential diagnosis. *J. consult. Psychol.*, 1956, 20, 99-104.—"To determine the extent to which Rorschach summary scores could discriminate among psychiatric populations," 337 selected Rorschach records obtained from 131 psychoneurotics, 106 psychopaths, and 100 schizophrenics were analyzed. The author is led to the conclusion that "for practical purposes, Rorschach summary scores cannot be regarded as effective in differentiating psychiatric groups." 23 references.—A. J. Bachrach.

6100. Kramer, Josef. Intelligenztest—mit einer Einführung in Theorie und Praxis der Intelligenzprüfung. (The intelligence test—with an introduction to the theory and practice of intelligence testing.) Solothurn, Switzerland: St.-Antonius, 1954, 288 p.

6101. Lal, Ram Surat. (Bureau Psychol., Allahabad, U. P., India.) Rorschach test and assessment of intelligence under Indian conditions. *Brit. J. educ. Psychol.*, 1956, 26, 112-116.—For a group of 39 normal subjects, ages 9-23, estimates of intelligence derived from Rorschach responses correlated .51 with Stanford Binet IQs, and somewhat less, though positively, with scores on a battery of

performance tests and a group test.—R. C. Strassburger.

6102. Leventhal, Howard. (U. N. C., Chapel Hill.) The effects of perceptual training on the Rorschach W and Z scores. *J. consult. Psychol.*, 1956, 20, 93-97.—49 male college students were divided into 3 groups, 2 groups receiving training on perceptual tasks (Mooney Closure Figures or Gottschaldt Figures), and a control group being given the Shipley-Institute of Living Scale. All 3 groups were given the respective tests before taking the Rorschach. "The group trained on the Gottschaldt Figures had significantly lower W and Z scores than the other two groups." The author concludes that "further caution must be exercised in the interpretation of Rorschach W and Z scores." 21 references.—A. J. Bachrach.

6103. Levine, Murray, & Meltzoff, Julian. Cognitive inhibition and Rorschach human movement responses. *J. consult. Psychol.*, 1956, 20, 119-122.—93 Ss were given the Rorschach and a task which was designed to measure the "efficiency of cognitive inhibition." Individuals who are more responsive to kinesthetic stimuli in the Rorschach are better able to inhibit associations than are those who are not productive of M responses. The authors believe that the findings "lend further support to the triadic hypothesis interrelating motor behavior, motion perception, and cognitive processes."—A. J. Bachrach.

6104. Levitt, Eugene E. (Inst. Juvenile Res., Chicago, Ill.) The development of prejudice: a critique of the Horowitz Faces Test. *Child Development*, 1956, 27, 155-171.—A critical examination of the original work with the Horowitz faces test, which deals with the development of anti-Negro prejudice in children, is made in terms of research design and analysis. The validity of the test is found to be "unsatisfactory" for logical and statistical reasons.—L. S. Baker.

6105. Lienert, G. A. (U. Marburg, Germany.) Zur Interpretation von Testprofilen. (Interpretation of test profiles.) *Diagnostica*, 1956, 2, 31-36.—This is a technical presentation of how to evaluate quantitative differences between subtest scores on tests offering profiles, e.g., Wechsler.—H. P. David.

6106. Lisansky, Edith S. (Yale U., New Haven, Conn.) The inter-examiner reliability of the Rorschach test. *J. proj. Tech.*, 1956, 20, 310-317.—40 Rorschach protocols, along with abstracts of the S's history, were submitted to 6 experienced Rorschachers for scoring and interpretation. Each Rorschacher was required to answer 10 questions about the S's intelligence, personality traits, and diagnosis. The life history abstracts alone were submitted to six other clinical psychologists who were required to answer the same 10 questions. The Rorschachers did not show significantly better agreement than did the judges using only the life history abstracts.—A. R. Jensen.

6107. Lit, Jack. Formal and content factors of projective tests in relation to academic achievement. *Dissertation Abstr.*, 1956, 16, 1505-1506.—Abstract.

6108. Lotsof, Erwin J., & Downing, Walter L. (U. California, Los Angeles.) Two measures of

anxiety. *J. consult. Psychol.*, 1956, 20, 170.—Brief report.

6109. Lüpnitz, Sonja. Der Scenotest als Mittel zur Erforschung der normalen kindlichen Persönlichkeit. (The Sceno-test as an instrument to study the personality of the normal child.) *Psychol. Rdsch.*, 1956, 7, 85-94.—The Sceno-test has been interpreted originally according to psychoanalytic symbolism which appeared during the sessions. However the protocols yield also enough material for a description of the structure of the child's personality. 4 types of behavior were characteristic for the test-situation: the objective-planning, the playful, the impulsive-overactive and the inhibited type. In the last case the Sceno-test cannot be used for a personality picture.—W. J. Kopitz.

6110. Mann, Lester. The relation of Rorschach indices of extratension and introversion to a measure of responsiveness to the immediate environment. *J. consult. Psychol.*, 1956, 20, 114-118.—"A study was carried out with fifty subjects to test the assumption that Rorschach indices of extratension and introversion are indicative of opposed orientations towards the external environment. Assuming that extratension is characterized by responsiveness to the immediate environment and introversion by a lack of such responsiveness, an attempt was made to demonstrate relationships between Rorschach E-I indices and an operationally defined measure of responsiveness to the immediate environment."—A. J. Bachrach.

6111. Maradie, Louis J. The goal-spurt hypothesis and the Rorschach test. *J. consult. Psychol.*, 1956, 20, 205-210.—Assuming that most Ss look upon the Rorschach test as threatening or challenging, anxiety may be aroused, with a sense of relief as the S approaches the end of the series of the cards. The author believes that the goal-spurt hypothesis for the increment in productivity on the last 3 cards of the Rorschach "is more parsimonious, is objectively demonstrable, is based upon studies concerned with the laws of learning and mental work and, quite apart from the various qualities attributable to color, explains the increment in productivity in the later-appearing cards."—A. J. Bachrach.

6112. Mariani, Eugene L. An analysis of relationships between test behavior and types of defense. *Dissertation Abstr.*, 1956, 16, 1506.—Abstract.

6113. Mariani, Rose Ramsay. A comparison of a projective test battery with its component tests. *Dissertation Abstr.*, 1956, 16, 1506-1507.—Abstract.

6114. Okarski, Joseph Frank. Consistency of projective movement responses. *Dissertation Abstr.*, 1956, 16, 1508.—Abstract.

6115. Peek, Roland M., & Storms, Lowell H. (Hastings (Minn.) State Hosp.) Validity of the Marsh-Hilliard-Liechti MMPI sexual deviation scale in a state hospital population. *J. consult. Psychol.*, 1956, 20, 133-136.—In a study to test the validity of the Marsh-Hilliard-Liechti sexual deviation scale for the MMPI, it was generally concluded that "the scale has little utility for the purpose for which it was designed and would fail to select sex offenders from many populations, since most people with high scores would have other than sexual problems. This scale seems to function more as a meas-

ure of general abnormality than of deviant sexual trends."—A. J. Bachrach.

6116. Phillipson, Herbert. Directions of development in projective techniques: The projective approach in relation to diagnosis and psychotherapy. *Brit. J. med. Psychol.*, 1956, 29, 139-149.—"My aim is to suggest that, on the one hand, the knowledge gained from the psychoanalytic investigation of personality, in particular that organized in terms of the theory of object relations, is essential to an adequate understanding of processes of perception and cognition and, on the other hand, to suggest that the study of personality dynamics in terms of perceptual processes and perceptual organization may make a contribution to advances in the theory and techniques of psychoanalytic forms of therapy. The use of projective techniques demonstrates the interdependence of these methods of understanding personality dynamics."—C. L. Winder.

6117. Pick, Thomas. (Educ. Dept., Hobart, Tasmania.) A critique of current methods of Rorschach scoring. *J. proj. Tech.*, 1956, 20, 318-325.—"After emphasizing the importance of rationale a scheme categorizing scores was discussed. It was then shown that Rorschach scores and/or aspects of scores fall into the following categories: (i) Scores categorizing the relationship between stimulus and response; (ii) scores based on a formal characteristic of a response; (iii) scores based on the frequency of the response in the population; (iv) scores based on phenomenological criteria. An internal contradiction in determinant scoring was then pointed out in that some of the criteria used are phenomenological, others objective; it was suggested that the two aspects be separated into two formal scores, if there is a discrepancy between the two."—A. R. Jensen.

6118. Popplestone, J. A. (Washington U., St. Louis, Mo.) Variability of the Bender Gestalt Designs. *Percept. Mot. Skills*, 1956, 6, 269-271.—Seven published versions of the Bender Gestalt designs are compared and found to show many variations in what are supposed to be "standard" stimuli. The author proposes that a single set of stimuli be employed in Bender Gestalt experimentation to promote more accurate communication about it and more valid judgments of it.—C. H. Ammons.

6119. Prakash, Veda. Practice effect in mental tests. *Univ. Rajputana Stud. Educ., Jaipur*, 1955, 1-86.—The study reports an investigation into the nature and extent of practice effect as observed in certain well-known tests of general ability administered to a group of students (122 children with mean age of 10 years) at an interval of 3 weeks. The re-test mean was found in each case to be considerably higher than the initial mean. "The evidence was unmistakable, therefore, that the ability to improve by practice had been a contributory factor in gaining a final position." 77-item bibliography.—U. Pareek.

6120. Reichard, Suzanne. Discussion: projective techniques as research tools in studies of normal personality development. *J. proj. Tech.*, 1956, 20, 265-268.—The writer discusses the three papers in this symposium (see 31: 6068, 31: 6122, 31: 6131) along with some history of the use of projective techniques in developmental psychology, and with special reference to psychoanalytic ego psychology.—A. R. Jensen.

6121. Reznikoff, Marvin, & Mundy, Laurence. (Institute of Living, Hartford, Conn.) Changes in human figure drawings associated with therapy: a case study. *Amer. J. Psychother.*, 1956, 10, 542-549.—"A case was presented in which changes in a series of figure drawings dramatically paralleled the clinical course of a patient undergoing psychotherapy. The drawing interpretations and the clinical evaluations were done independently throughout. It is suggested that figure drawings receive further consideration as an objective means of evaluating psychotherapy."—L. N. Solomon.

6122. Ricciuti, Henry N. Use of the Rorschach test in longitudinal studies of personality development. *J. proj. Tech.*, 1956, 20, 256-260.—The potential research advantages afforded by Rorschach material collected longitudinally on intensively studied individuals, as well as some of the theoretical and methodological questions and difficulties which arise in such an approach are discussed, with special reference to the Rorschach. A number of researches of the Child Research Council are briefly described.—A. R. Jensen.

6123. Rohde, Amanda R. (Camarillo State Hosp., Calif.) The sentence completion method; its diagnostic and clinical application to mental disorders. New York: Ronald Press Co., 1957. xii, 301 p. \$7.50.—Describes the author's sentence completion technique as an important clinical tool for investigating personality. Part I (4 chapters) reviews the literature, and describes the administration, scoring, standardization, and interpretation of the method. Part II (4 chapters) explains how the test can be used to differentiate normal personalities from neurotics and psychotics. 23 illustrative cases, scored and interpreted, are included. An Appendix contains a personality rating questionnaire as well as interpretation and scoring forms for the completion test.—F. Costin.

6124. Rohrer, J. H., & Edmonson, Barbara W. (Tulane U., New Orleans, La.) An experimental study of the effects of individual and group presentation of the Rorschach plates. *J. clin. Psychol.*, 1956, 12, 249-254.—Individual and group Rorschachs were given in a counterbalanced order to 48 paid, volunteer, ROTC undergraduates. 13 of 36 scoring categories yielded at least significant differences when first and second test administrations were compared. "Essentially, the shifts noted were ones which, on second administration, reflect a relatively more meticulous, controlled and intellectualized exploration of the stimulus materials." Type of presentation resulted in only two very significant differences—a percentage increase in anatomy and VIII, IX, and X responses on individual presentation. The first difference was thought to be related to the examiner rather than the type of presentation variable.—L. B. Heathers.

6125. Romanowski, Walter Vincent. The revision and factor analysis of a pictographic self rating scale. *Dissertation Abstr.*, 1956, 16, 1278-1279.—Abstract.

6126. Roth, Anton. (Univ. Erlangen, Germany.) Erfahrungen mit dem Make A Picture Story von Edwin S. Schneidman. (Experiences with Schneidman's MAPS test.) *Diagnostica*, 1956, 2, 21-30.—

The author reports on his experiences in administering the MAPS to 60 adult German subjects, comparing his findings to those reported by Shneidman and another German psychologist, Feuerabendt. Respondents criticized the test materials as "typically American" but did not reject the task. Differences in German and American approaches, advantages and limitations of the MAPS in the German language area, and suggestions for providing additional figures are discussed.—H. P. David.

6127. **Rothney, John W. M.** (U. Wisconsin, Madison.), & **Heimann, Robert A.** **Development and applications of projective technics.** *Rev. educ. Res.*, 1956, 26, 56-71.—In spite of the quantitative increase in research on projective techniques, it is clear that the clinicians have not resolved the dilemma "in choosing between the extremes of impressionism and objectivity." The "overwhelming" number of writings on projective methods is "punctuated only occasionally by a soundly designed validation attempt or a meaningful normative study." The authors consider 100 recent studies under the categories of new tests and books, studies of validity and reliability, normative procedures, and applications of projective devices. They conclude that "unanimous agreement about the value of projective technics does not exist among the research workers who develop and use them."—W. W. Brickman.

6128. **Siegel, Laurence.** (Miami U., Oxford, O.) **A biographical inventory for students: II. Validation of the instrument.** *J. appl. Psychol.*, 1956, 40, 122-126.—Scores on the BIS (see 31: 3079) were correlated, for samples of college freshmen, with 5 scholastic ability and achievement measures, 2 personality inventories, 2 values inventories, and vocational choice (major field of study). The magnitude and significance of the correlations between these 10 criteria and the 10 subscale scores of the BIS are discussed.—P. Ash.

6129. **Sieglman, Aron W.** **Cognitive, affective, and psychopathological correlates of the Taylor Manifest Anxiety Scale.** *J. consult. Psychol.*, 1956, 20, 137-141.—"Patients with a diagnosis of anxiety reaction had significantly higher Taylor MAS scores than all other diagnostic groups, whereas patients with a diagnosis of psychopathic personality had significantly lower scores than all other diagnostic groups." It was also suggested that "individual differences in self-awareness and sensitivity to one's symptoms seems to be another source of variance of the Taylor scale." 21 references.—A. J. Bachrach.

6130. **Sieglman, Aron W.** (VA Hosp., Bronx, N. Y.) **The effect of manifest anxiety on a concept formation task, a nondirected learning task, and on timed and untimed intelligence tests.** *J. consult. Psychol.*, 1956, 20, 176-178.—Psychiatric and medical patients of at least normal intelligence, without psychosis or suspected cortical damage, were given tests such as the Taylor MAS, the WAIS, Raven's Progressive Matrices, the Bender Gestalt, and the Bender Gestalt Recall Test. One finding was: "Ss who received high scores on the MAS obtained significantly lower scores on the timed than on the untimed subtests of the WAIS." One suggestion is that anxiety has a disruptive effect on abstraction, incidental learning, and timed intelligence tests.—A. J. Bachrach.

6131. **Sigel, Irving E., & Hoffman, Martin L.** (Merrill-Palmer Sch., Detroit, Mich.) **The predictive potential of projective tests for nonclinical populations.** *J. proj. Tech.*, 1956, 20, 261-264.—A study is described in which the environmental aspects of the specific situation toward which predictions were made were conceptualized in detail and projective materials appropriate to the kind of predictions made were used. A high degree of predictive success was obtained, presumably as a result of using test stimuli which correspond content-wise to the area of real life under study, of predicting from a coherent personality picture of the respondent, and of conceptualizing in advance the behavioral situation toward which the predictions are made.—A. R. Jensen.

6132. **Sinnett, E. Robert, & Roberts, Ruth.** **Rorschach approach type and the organization of cognitive material.** *J. consult. Psychol.*, 1956, 20, 109-113.—"There is no support for the hypotheses relating Rorschach approach and thinking in terms of generalizations or details using either a structured or an unstructured cognitive task; there is evidence that Z, a measure of organizational activity on the Rorschach, is related to selecting more highly organized responses in a structured cognitive task when intelligence and speed are controlled, [and] when compared with the Rorschach variables used in this study, vocabulary, an intellectual measure, is a better predictor of choice of relevant details and generalizations from irrelevant generalizations and details regardless of whether speed is controlled."—A. J. Bachrach.

6133. **Sippelle, Carl N., & Swensen, Clifford H.** (U. Tennessee, Knoxville.) **Relationship of sexual adjustment to certain sexual characteristics of human figure drawings.** *J. consult. Psychol.*, 1956, 20, 197-198.—"Forty-nine psychotherapy patients were rated by their therapists on sexual adjustment. Several sexual aspects of the patient's human figure drawings were rated. It was found that there was no significant relationship between the patient's sexual adjustment and the sexual characteristics of their human figure drawings."—A. J. Bachrach.

6134. **Smith, John R., & Coleman, James C.** **The relationship between manifestations of hostility in projective tests and overt behavior.** *J. proj. Tech.*, 1956, 20, 326-334.—The relationship between overt hostility displayed by children in their schoolroom behavior and the hostile content of their Rorschach and MAPS protocols was investigated. "There was a low but statistically significant correlation between the hostile content in the Rorschach and overt hostility. . . . A positive and statistically significant relationship was found between the degree to which hostile themes were acted out without modification in the MAPS protocols and overt hostility." "None of the correlations between the hostile projective test content and overt hostility were high enough to make these measures useful as predictive instruments on an individual level."—A. R. Jensen.

6135. **Smith, Thomas Wood.** (Covina (Calif.) Pub. Schs.) **Comparison of test bias in the Davis-Eells Games and the CTMM.** *Calif. J. educ. Res.*, 1956, 7, 159-163.—Data on the two tests were obtained on 276 fifth-grade Los Angeles County pupils living in an area which the 1950 census data indicated to be predominantly "skilled, operatives, sales, and

clerical. . . The small but significantly positive correlation of the Davis-Eells Games with occupational rank indicated that approximately the same limited amount of 'test bias' existed in this instrument as in the new California Test of Mental Maturity."—*T. E. Newland.*

6136. Spiegelman, Marvin. Rorschach form-level, intellectual functioning and potential. *J. proj. Tech.*, 1956, 20, 335-343.—This is a review of the literature on the assessment of intelligence in Rorschach interpretation as compared with IQ testing. Also an original investigation is reported: 122 psychiatric patients were given the Wechsler-Bellevue (Verbal Scale) and the Rorschach. A correlation of .55 was found between average form-level and IQ. Correlation between R and IQ was .32, and between M and IQ was .30. 24 references.—*A. R. Jensen.*

6137. Spreen, Otfried. Stirnhirnverletzte im Rorschach-Versuch; II. Statistische Ergebnisse. (Frontal brain injuries on the Rorschach tests; II. Statistical data.) *Z. diagnost. Psychol.*, 1956, 4, 146-173.—In this continuation of a previous paper (see 30: 1060), the author presents statistical findings from his Rorschach testing of 49 basal and 51 dorsal brain injured patients. The significant quantitative differences reported suggest that the two types of brain injuries should be studied separately and not in a single combined category of frontal brain injury. Comparison of the two sub groups with non-frontal brain injured patients also yielded significant quantitative differences. 47 references. English and French summaries.—*H. P. David.*

6138. Taulbee, Earl S., Sisson, Boyd D., & Gaston, Charles O. Affective ratio and 8-9-10 per cent on the Rorschach test for normals and psychiatric groups. *J. consult. Psychol.*, 1956, 20, 105-108.—"The AR and 8-10% ratios were computed from the Rorschach protocols of 654 subjects, representing groups of normal, neurotic, and schizophrenic adults and normal, behavior problem, and mentally defective children. Significant mean differences between some of the groups are obtained which suggest a relationship between the ratios and gross personality differences such as are implied in normal and psychodiagnostic groups.—*A. J. Bachrach.*

6139. Tesseneer, Ralph, & Tydlaska, Mary. A cross-validation of a work attitude scale from the MMPI. *J. educ. Psychol.*, 1956, 47, 1-7.—Two groups, each composed of 26 college students, who had been identified by 3 or more faculty members as examples of good and poor work attitude were administered the MMPI. Statistically significant differences at a high level of confidence were found between the groups on 2 experimental scales—the Dominance and Work Attitude scales. A tentative pattern to aid in the identification of poor work attitude risks (potential) was established. 19 references.—*F. Costin.*

6140. Voas, Robert B. Correlates of reading speed and the time required to complete personality inventories. *USN Sch. Aviat. Med. Res. Rep.*, 1956, No. NM 001 108 100, Rep. No. 16, ii, 7 p.—260 Naval cadets were timed without their knowledge while taking the Minnesota Multiphasic Personality Inventory and Guilford-Zimmerman Temperament Survey. The time required to complete the MMPI

was correlated .72 with the time required to complete the GZTS. This working time was found to be related primarily to reading speed and intelligence. Small but significant correlations were obtained between reading speed and several MMPI and GZTS scales.

6141. Voas, Robert B. A procedure for reducing the effects of slanting questionnaire responses toward social acceptability. *USN Sch. Aviat. Med. Res. Rep.*, 1956, No. NM 001 108 100, Rep. No. 17, ii, 9 p.—The Guilford-Zimmerman Temperament Survey and Minnesota Multiphasic Personality Inventory were administered to Naval aviation cadets by a method in which both socially acceptable and self-descriptive answers were obtained contiguously. Self-descriptions obtained with socially acceptable responses were significantly less biased towards acceptability in 13 of the 24 scales than were the scores of controls who received these inventories under normal conditions. Thus, allowing Ss to give acceptable answers along with self-descriptions appeared to reduce the bias in the latter.

6142. Vuyk, Rita. De waarde van de Szondi-Test. (The value of the Szondi Test.) *Ned. Tijdschr. Psychol.*, 1956, 11, 447-468.—A critical study of the Szondi Test and its validation problems. It is stressed that, in order to be able to evaluate test results of the Szondi, his underlying dynamic-functional theories must be known and accepted. The dangers inherent to blind diagnosis on the basis of the Szondi profile are stressed and the difficulties of clinical validation of projective material pointed out.—*R. H. Howwink.*

6143. Weaver, H. B., & Boneau, C. A. Equivalence of forms of the Wonderlic Personnel Test: a study of reliability and interchangeability. *J. appl. Psychol.*, 1956, 40, 127-129.—If a replicated 5 x 5 Latin square design, the 5 forms of the Wonderlic were administered in 5 orders to 14 sets of 5 subjects. "The Wonderlic forms vary in level of difficulty and cannot be regarded as equivalent and interchangeable . . . the forms appear also to vary in reliability."—*P. Ash.*

6144. Webb, Wilse B., & Izard, Carroll E. Reliability of responses to pictures of peers. *J. proj. Tech.*, 1956, 20, 344-346.—"A group of 110 naval cadets were presented pictures of 157 other cadets with whom they were not personally acquainted. They were asked to record whether each picture impressed them very favorably, mildly favorably, mildly unfavorably, or very unfavorably. Few stimuli are as discretely associated with socially mediated rewards and punishments as the human face. These facts plus the experimental reliability of this response demonstrated in this paper should enhance the consideration of this response as an experimental variable."—*A. R. Jensen.*

6145. Weston, Miriam Drake. Mother and son descriptions of mothers and sons in a picture story test. *Dissertation Abstr.*, 1956, 16, 1288-1289.—Abstract.

6146. Wetherhorn, Mitchell. Flexor-extensor movement on the Rorschach. *J. consult. Psychol.*, 1956, 20, 204.—Brief report.

6147. Wewetzer, Karl-Hermann. (U. Marburg/Lahn, Germany.) Bender-Gestalt-Test bei Kindern:

Auswertungsmethode und differentialdiagnostische Möglichkeiten. (The Bender-Gestalt test in children: a method of evaluation and differential diagnostic possibilities.) *Z. diagnost. Psychol.*, 1956, 4, 174-186.—"A new scoring method of the Bender-Gestalt test for children is presented, based upon a negative-evaluation; adequate representation is scored low (zero), most inadequate representation is given highest scores." Similarity, completeness, direction, relation, proximity, and movement are scored separately. A significant correlation with the Binet-Norden is reported. Partial scores permit "satisfactory differentiation between normal and brain-injured children." English and French summaries.—*H. P. David.*

6148. Wilbanks, William A., Webb, Wilse B., & Tolhurst, Gilbert C. A study of intellectual activity in a noisy environment. *USN Sch. Aviat. Med. Res. Rep.*, 1956, No. NM 001 104 100, Rep. No. 1, iii, 7 p.—4 tests from the Differential Aptitude Tests were given to Naval aviation cadets under normal testing conditions and with a 100 decibel background noise. Significantly higher scores were obtained under noise on the DAT Clerical Speed and Accuracy test. This effect could be demonstrated only when ability differences among the cadets were controlled. It was also found that individuals maintain their relative position within the population in both noise and quiet. The implications for selection are discussed.

6149. Wirt, Robert D. (Stanford U., California.) Ideational expression of hostile impulses. *J. consult. Psychol.*, 1956, 20, 185-189.—Using an aggressive content scale in the analysis of the Rorschachs of normal, neurotic, and psychotic Ss, it was found that there was a statistically significant difference in hostile ideation among the three groups and between any two. The normals showed the least hostility, next were the schizophrenics, and the neurotic group scored the most. The groups showed a significant difference in the direction of punitiveness, with the normal group tending to direct hostility outward, the schizophrenics inward, while the neurotic group showed no characteristic direction. 30 references.—*A. J. Bachrach.*

6150. Wolfson, William, & Wolff, Frances. (Middleton State Hosp., Conn.) Sexual connotation of the name Blacky. *J. proj. Tech.*, 1956, 20, 347.—"In this study it was shown that the dog name 'Blacky' by itself, was not sexually neutral as Blum implied but that 'Blacky' was predominantly male in connotation irrespective of the sex of the rater. This held for psychiatric patients as well as normals. No attempt was made to see how much of a factor this was in the actual utilization of the Blacky Pictures."—*A. R. Jensen.*

6151. Wysocki, Boleslaw A. (U. London, Eng.) Rorschach card preferences as a diagnostic aid. *Psychol. Monogr.*, 1956, 70(6), No. 413, 16 p.—On the basis of preference ranking of the 10 cards of the Rorschach by 294 male and 80 female subjects, Wysocki concludes that "Rorschach cards reveal some personality characteristics." His studies seem to support the view that there are differential preferences based upon sex, normality vs. abnormality, hysterical vs. schizophrenic personality, and between introverts and extraverts. Such differences as observed

appear to be related to chromatic versus achromatic characteristics of the card, while in other situations it is the color, form, or the content that appears important. Even animal movement versus human movement cards are found capable of distinguishing the extraverts from introverts. The potential value of these findings as a diagnostic tool in Rorschach research is indicated. 22 references.—*M. A. Seidenfeld.*

(See also abstracts 5326, 5774, 6014, 6239, 6307, 6332, 6401, 6442, 6470)

TREATMENT METHODS

6152. Abse, David Wilfred, & Ewing, John A. Transference and countertransference in somatic therapies. *J. nerv. ment. Dis.*, 1956, 123, 32-40.—The need for an awareness of unconscious transference and countertransference reactions in the physician-patient relationship is emphasized. Such awareness should lead to a fuller understanding of the psychological implications involved in these therapies and to their more effective use. 18 references.—*N. H. Pronko.*

6153. Adler, Alexandra. Problems in psychotherapy. *Amer. J. indiv. Psychol.*, 1956, 12, 12-24.—An account of treatment of various mental disorders is presented.—*A. R. Howard.*

6154. Ashby, Jefferson D. The effect of a reflective and of a leading psychotherapy on certain client characteristics. *Dissertation Abstr.*, 1956, 16, 1487.—Abstract.

6155. Ayd, Frank J., Jr. Physiologic and neurologic responses to chlorpromazine: their clinical significance and management. *Psychiat. Res. Rep.*, 1956, No. 4, 64-70.—With large dosages the drug may be accompanied by physiological (temperature changes), endocrinological (menstruation difficulties, mammary growth and lactation), neurological (extrapyramidal disorders, motor restlessness, dystonia), and psychological (feelings of depersonalization, depressions) reactions. "These side effects seldom justify discontinuance . . . most of these reactions disappear with continued treatment or may be controlled by other drugs being added to the patient's medication."—*L. A. Pennington.*

6156. Balser, Benjamin Harris. (Ed.) Psychotherapy of the adolescent. New York: International Universities Press, 1957. 270 p. \$5.00.—Papers by psychiatrists on psychotherapy of adolescents in all degrees of intensity, and from private practice to hospital treatment. Topics discussed include: parents' relation to treatment, approaches to the silent adolescent, relative emphasis on present and past, what should be interpreted, choice of school and curriculum, normal problems in contrast to abnormal development, the impact of the broken home, preparing the adolescent for psychotherapy, use of tests, length of treatment, and problems of training for psychotherapy of adolescents. A therapeutic interview with an adolescent is included along with a commentary, and a schoolmaster gives his views on psychotherapy of adolescents.—*E. W. Eng.*

6157. Basowitz, Harold; Korchin, Sheldon J., Oken, Donald; Goldstein, Maurice S., & Gussack, Harold. Anxiety and performance changes with

- a minimal dose of epinephrine. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 98-105.—12 normal Ss were given prolonged infusion at a low dose level "and evaluated for changes in subjective state, cardiovascular activity, and a variety of tasks sampling sensory thresholds, motor performance, and intellectual control." It is "proposed that the total effect of epinephrine requires consideration of the person's psychological defense structure and characteristic reactions to stress."—L. A. Pennington.
6158. Belden, Arvord W. Patient attitudes in psychotherapy. *Dissertation Abstr.*, 1956, 16, 1499-1500.—Abstract.
6159. Beukenkamp, Cornelius, Jr. Beyond transference behavior. *Amer. J. Psychother.*, 1956, 10, 467-470.—A multidimensional view of human behavior sees 3 levels of interaction: the child-parent configuration; the sibling-to-sibling and family-member to society feelings; and self limited and prepropagational, anti-original familial directed enterprise. "Beyond transference behavior" refers to these multiple meaningful relationships which approximate normal family life. Desirable clinical results in this area consist of new experiential behavior within a given single configuration or polarity and behavior which possesses the feelings of belonging to a multiple human structure.—L. N. Solomon.
6160. Bockoven, J. Sanbourne. Moral treatment in American psychiatry. *J. nerv. ment. Dis.*, 1956, 124, 167-194.—The story is told of how the psychological and moral support of patients in American hospitals passed into the void to be followed by mere custodial care for almost the past 100 years.—N. H. Pronko.
6161. Bronner, Alfred. Chlorpromazine (Thorazine) in office practice. *Amer. J. Psychother.*, 1956, 10, 460-466.—The advantages of chlorpromazine as used in the office are as follows: it is more effective than previously available medication in indicated cases; it allows psychotherapy by improving the patient's most distressing symptoms; and in some patients it obviates the need for shock therapy or hospitalization. The disadvantages are: it does not appear to be a truly causal therapy; because of side reactions and possible toxicity it bears close watching initially.—L. N. Solomon.
6162. Carrère, Jean. Psychothérapie et évidence. (Psychotherapy and evidence.) *Ann. Méd. Psychol.*, 1956, 1, 384-397.—Noting how difficult it is for anyone to observe objectively his behavior, the author proposes, as a therapeutic tool, the dramatic use of this confrontation which he calls "psycho-shock." After the acute stage of his illness is passed, the patient is presented, as in a mirror, the "reality" of his pathological behavior. This "evidence," given to the patient, by means of recordings and films taken during his acute episode, has definite therapeutic effects on the future course of his illness.—M. D. Stein.
6163. Carter, C. H. (Florida Farm Colony, Gainesville.) The effects of reserpine and methylphenidylacetate (Ritalin) in mental defectives, spastics, and epileptics. *Psychiat. Res. Rep.*, 1956, No. 4, 44-48.—The positive effects of the 2 drugs are described following a 6-month study of 223 mentally retarded, epileptic, spastic, and emotionally disturbed children and adolescents. Improvement is characterized by reference to measures of behavior change, sociability, "general learning," and "functional I. Q. according to standardized tests."—L. A. Pennington.
6164. Chiappone, S. J. Hypnoanesthesia, surgery and full denture construction with hypnodontics. (A case history.) *J. Amer. Soc. psychosom. Dent.*, 1956, 3(2), 16-17.—The procedure and results of the use of hypnosis for dental surgery and denture construction in a patient are described.—J. H. Manhold, Jr.
6165. Cohen, Irvin M. (U. Texas Med. Br. Galveston.) Complications of chlorpromazine therapy. *Amer. J. Psychiat.*, 1956, 113, 115-121.—Clinical observations were made on a series of 1400 cases covering 14 months' experience with chlorpromazine therapy. Complications ranging from minor symptoms to major reactions of major importance are described.—N. H. Pronko.
6166. Deissler, Karl J. (Herrick Mem. Hosp., Oakland, Calif.) The psychosomatic approach in prescribing occupational therapy. *Amer. J. occup. Ther.*, 1956, 10, 240-242.—A discussion of the relative therapeutic significance of the therapist as he affects the patient's recovery. Particularly important in the opinion of Deissler is an increasing capacity for self-insight as an important factor in all those who engage in the treatment program. Too much emphasis has been placed upon the importance of insight of the patient and upon insight of physician and therapist as it applied to the patient without suitable appreciation that self-examination and self-insight are equally important.—M. A. Seidenfeld.
6167. Feldman, Paul E. Psychiatric treatment; somatic methods. *Industr. Med. Surg.*, 1956, 25, 232-236.—This article discusses various therapies employed in treatment of the mental patient.—(Courtesy of Rehab. Lit.)
6168. Ford, Donald Herbert. An experimental comparison of the relationship between client and therapist in a reflective and a leading type of psychotherapy. *Dissertation Abstr.*, 1956, 16, 1490-1491.—Abstract.
6169. Foulkes, S. H., & Anthony, E. J. Group psychotherapy; the psycho-analytic approach. Baltimore, Md.: Penguin Books, 1957. 263 p. 85¢.—The 9 chapters of this paper bound volume are divided into 3 parts. There is a condensed section covering the background of group psychotherapy including Slavson's theory, Wolf's psychoanalytic approach, Sutherland and Ezriel's work, Lewin's topology, Burrow's notion of the social order, and Frank's view of social disintegration. Part II contains clinical material and demonstrations of group analytical techniques. The concluding section on "metatheory" emphasizes communication and the interaction of the group matrix.—B. H. Light.
6170. Frankl, Victor E. (U. Vienna, Austria.) From psychotherapy to logotherapy. *Pastoral Psychol.*, 1956, 7(65), 56-60.—Logotherapy is "psychotherapy in terms of the mind," a supplement of psychotherapy which deals with philosophical questions.—A. Eglash.
6171. Gaches, J., & Le Beau, J. Résultats et séquelles de la chirurgie frontale sélective. (Results and sequelae of selective frontal surgery.) *Ann. Méd. Psychol.*, 1956, 1, 371-384.—Fifty patients suf-

fering from psychosis, epilepsy and intractable pain have been followed up for 5 years after selective frontal surgery. The results show 16 complete, 19 partial recoveries. There seems to be no diminution of intelligence, little appreciable change in the personality, except in cases of psychopaths (their personality disorders seem to worsen) and of epileptics (who show a marked improvement). The best clinical results appear to be achieved in the cases of intractable pain.—*M. D. Stein.*

6172. **Gamburg, A. L.** O roli slovesnogo vnusheniia v effektivnosti deistviia lekarstvennykh veshchestv. (On the role of verbal suggestion in the effectiveness of the action of curative preparations.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6(1), 87-92.—Verbal suggestion can reinforce, decrease, inhibit, or distort a patient's reactions to caffeine and luminal.—*I. D. London.*

6173. **Gordon, Jesse E.** The efficacy of two kinds of therapist verbal behavior in lifting repression. *Dissertation Abstr.*, 1956, 16, 1491-1492.—Abstract.

6174. **Guerney, Bernard G.** Client dependency, guardedness, openness, and resistance in a reflective and in a leading psychotherapy. *Dissertation Abstr.*, 1956, 16, 1492-1493.—Abstract.

6175. **Guerney, Louise Fisher.** Differential effects of certain therapist characteristics on client reactions to psychotherapy. *Dissertation Abstr.*, 1956, 16, 1493-1494.—Abstract.

6176. **Guntrip, Henry.** (*Leeds U., Eng.*) **Psychotherapy and religion.** New York: Harper, 1957. 206 p. \$3.00.—The purpose of psychotherapy is not to help people avoid anxiety but to confront it to enlarge their freedom. People resist this kind of help and may use physical pain to hide their anxiety that arises from the threat to good-object relations. The development of psychoanalysis is traced and multi-personal structure described. Primary defences against anxiety, defensive techniques, ways of relieving tension all present difficulties for therapy. The cure of anxiety, psychotherapy and values, and psychotherapy and religion are discussed.—*G. K. Morlan.*

6177. **Hauser, Andrée.** The drawing as a help in child-psychotherapy. *Amer. J. indiv. Psychol.*, 1956, 12, 53-58.—3 cases illustrate the advantages of drawing in awakening unemployed capacities, explaining style of life, providing encouragement.—*A. R. Howard.*

6178. **Henner, Robert.** The team approach to hearing and speech disorders. *J. Amer. med. Ass.*, 1956, 161, 957-960.—Describes the responsibilities of various staff members of the hearing and speech clinic at Michael Reese Hospital, Chicago, and benefits in the multi-discipline approach. 4 members of the group—the otologist, clinical audiologist and speech pathologist, medical social worker, and clinical psychologist—and their duties are discussed more in detail.—(*Courtesy of Rehab. Lit.*)

6179. **Himwich, Harold E. (Ed.)** **Tranquilizing drugs.** Washington, D. C.: American Association for the Advancement of Science, 1957. viii, 197 p. \$5.00.—The symposium, held under auspices of the AAAS in cooperation with the American Psychiatric Association and the American Physiological Society

at Atlanta, Georgia, December 27-28, 1955, dealt chiefly with reserpine, chlorpromazine, azacyclonol, and meprobromate. 4 papers analyze the electrophysiological effects of the tranquilizing drugs. The metabolic factors in the action of chlorpromazine are considered and adrenolutin is discussed as a psychotomimetic agent. 8 papers deal with therapeutic considerations.—*C. T. Bever.*

6180. **Ilan, Eli.** Musag ha "haavara" etsel Freud v'talmidav. (The concept of "transference" of Freud and his pupils.) *Ofakim*, 1956, 10, 156-159.—A historical-critical analysis of this concept.—*H. Ormian.*

6181. **Kadis, Asya L.** Re-experiencing the family constellation in group psychotherapy. *Amer. J. indiv. Psychol.*, 1956, 12, 63-68.—3 aspects of the group psychotherapeutic process are selected to illustrate how individuals reveal and re-experience the climate of their own family group.—*A. R. Howard.*

6182. **Kahn, Robert L.** (*Hillside Hosp., Glen Oaks, N. Y.*), **Fink, Max, & Weinstein, Edwin A.** Relation of amobarbital test to clinical improvement in electroshock. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 23-29.—It is suggested that the therapeutic action of electroshock is related to the "production of a milieu of brain dysfunction in which denial of illness might occur." This hypothesis is investigated by the repeated administration of the "Amytal test" to 24 psychiatric patients undergoing electroshock therapy. Results indicated "a relation between clinical improvement and the production of brain damage or an altered state of brain function. . . . In patients who improve, the 'test' becomes consistently positive early in the course of treatment. . . ." It is concluded that "the faculty of changing symbolic patterns regardless of content is a factor in improvement."—*L. A. Pennington.*

6183. **Kapit, Hanna Elizabeth.** Relationships between attitudes toward therapist and attitudes toward parents. *Dissertation Abstr.*, 1956, 16, 1284.—Abstract.

6184. **Kass, Irving, & Brown, Earl C.** (*V.A. Center, Wadsworth, Kans.*) **The use of Metrazol as a mood conditioning drug: a discussion as to its mode of action.** *J. nerv. ment. Dis.*, 1956, 123, 57-64.—A clinical and psychometric evaluation is given of Metrazol as a mood conditioning drug. Its site and mode of action and its contraindications are also discussed. 44 references.—*N. H. Pronko.*

6185. **Kinross-Wright, Vernon.** (*Texas Med. Cent., Houston.*) **Clinical trial of a new phenothiazine compound: NP-207.** *Psychiat. Res. Rep.*, 1956, No. 4, 89-94.—Intensive study of the phenothiazine derivatives has led to the synthesis by the Sandoz Laboratories in Switzerland of NP-207. Chemical and animal pharmacological studies are reviewed. The results of clinical tests, applied to 32 patients, indicated the new drug has therapeutic effects similar to that of chlorpromazine. The late incidence of toxic retinitis in several patients led to the discontinuance of the study. Additional investigations are planned.—*L. A. Pennington.*

6186. **Kramer, H. C.** (*Pilgrim State Hosp., West Brentwood, L. I., N. Y.*) **Similar antiphlogistic reactions after prefrontal lobotomy and treatment with chlorpromazine.** *J. nerv. ment. Dis.*, 1956, 123, 72-78.—A series of cases is presented of female pa-

tients following prefrontal lobotomy who have shown an apparently complete recovery from otitis media, dacrocystitis, recurrent hordeolum, vaginitis and acne vulgaris, respectively. Similar beneficial effects of chlorpromazine therapy are pointed out and a possible common mechanism for both therapies is suggested.—N. H. Pronko.

6187. Lerner, Philip F. (1111 St. Paul St., Baltimore 2, Md.) **Kemadrin, a new drug for treatment of Parkinsonian disease.** *J. nerv. ment. Dis.*, 1956, 123, 79-82.—Results with this new synthetic spasmolytic agent in the treatment of 30 Parkinsonian patients are discussed.—N. H. Pronko.

6188. Lesse, Stanley. **Psychotherapy and ataraxics; some observations on combined psychotherapy and chlorpromazine therapy.** *Amer. J. Psychother.*, 1956, 10, 448-459.—Some preliminary observations on the combined use of psychotherapy and chlorpromazine with a wide variety of patients, gathered over a two and one-half year period, are presented. Observations on the combined therapy include the relation of chlorpromazine to transference relationships, dreams, clinical symptoms, and depression. The use of chlorpromazine to control anxiety, obviate hospitalization, and bring very anxious neurotic and schizophrenic patients within the scope of dynamically oriented psychotherapy is discussed. Comments of Dr. Joseph Wilder are included.—L. N. Solomon.

6189. MacDonald, John M., & Daniels, Mary L. **The psychiatric ward as a therapeutic community.** *J. nerv. ment. Dis.*, 1956, 124, 148-155.—Problems are discussed as they arose during the development of a therapeutic community in a psychiatric hospital which provided for the accommodation of both sexes on two of the wards and the unlocking of one ward.—N. H. Pronko.

6190. Meerloo, Joost A. M. **The father cuts the cord: the role of the father as initial transference figure.** *Amer. J. Psychother.*, 1956, 10, 471-480.—"This study emphasizes the specific role of the father in making the child independent of its symbiotic ties with the mother. 'Cutting the cord' symbolizes the removal from the realm of the mother. A child's relationship to the father determines the nature of the initial transference as well as later trial relationships."—L. N. Solomon.

6191. Mermelstein, Matthew D. (Clarinda Ment. Health Inst., Iowa.) **Evaluative study of one hundred transorbital leucotomies.** *J. clin. Psychol.*, 1956, 12, 271-276.—This is a follow up of 100 patients 18 to 36 months after having received transorbital leucotomies. All but six of the patients were still in the hospital. The results were less encouraging on this follow up than on one made one to three months after the operation. At the time of the second follow up 75% of the patients were rated as showing no improvement. "Reduction of violent behavior, tension, and anxiety was not substantially accomplished."—L. B. Heathers.

6192. Moreno, J. L. **The first book on group psychotherapy.** (3rd ed.) Beacon, N. Y.: Beacon House, 1957. xxiv, 138 p. \$3.50.—A republication of Moreno's 1932 monograph on group psychotherapy. The author introduces his republication through a personal interview. He outlines his current thinking

as well as the principles of group psychotherapy. The remaining portion of the text is devoted to the application of the group process to a prison population. There is a description of the spontaneity test, of classification schemes, symmetric relations, and "complexes." The addenda contain an evaluation of the group plan by eminent leaders in psychology and psychiatry. Moreno concludes that it is possible "to develop an exact science of group organization, a sociology."—B. H. Light.

6193. Murray, Edward J. (Yale U., New Haven, Conn.) **A content-analysis method for studying psychotherapy.** *Psychol. Monogr.*, 1956, 70(13), (No. 420), 32 p.—This is a study of "the verbal phenomena in psychotherapy with respect to the underlying emotional processes" and is thus designed to increase our understanding on one element in psychotherapy so that it may be viewed with greater objectivity. The method utilized is based on "the content analysis of the verbal behavior of the patient and the therapist." The 3 cases structured, in spite of important limitations in the method, appear to be of some theoretical significance. It is concluded, therefore, that method as presented in the appendices of the monograph is useful and may be presumed to have some validity. 25 references.—M. A. Seidenfeld.

6194. Oglesby, William B. Jr. (Union Theological Seminary, Richmond, Va.) **Evangelistic results of effective counseling.** *Pastoral Psychol.*, 1956, 7(65), 25-30.—A 3-way dialog illustrates how nondirective counseling may communicate a Gospel of forgiveness and reconciliation.—A. Eglash.

6195. Porteus, S. D. (Territorial Hospital, Kaneohe, Hawaii.) **Variations spécifiques du comportement sous l'effet de la chlorpromazine.** (Specific variations in behavior under the effect of chlorpromazine.) *Rev. Psychol. appl.*, 1956, 6, 187-202.—Chlorpromazine therapy was given to 80 patients in a psychiatric ward; placebo to a control group of the same size. On rating scales measuring 11 aspects of behavior, improvement was noted on all but asocial behavior. Largest gains were registered in respect to hallucinations, compulsive reactions, delirium, mental confusion, and agitation. A characteristic curve showed initial improvement in the first 3 weeks, slight regression in the next 3, and marked gains from the sixth to the twelfth weeks. Testing with the Porteus Maze revealed losses similar to those following pre-frontal lobotomies.—W. W. Wattenberg.

6196. Reichel, Samuel M. **Color therapy for environmental monotony in chronic disease hospitals.** *Hospitals*, 1956, 30(11), 54-55.—Psychologically, physiologically, the value of utilizing color, especially in linens, in the chronic hospital is enormous. The use of white emphasizes the abnormal and severe hospital atmosphere, may be partly responsible for visual fatigue, and is undesirable from the aesthetic standpoint. Colors which can be used and the manner in which they are distributed are discussed.—(Courtesy of Rehab. Lit.)

6197. Rosen, Elizabeth. **Dance in psychotherapy.** New York: Bureau of Publications, Teachers College, Columbia University, 1957. xx, 178 p. \$4.50.—Creative motility in the form of dance activities was studied as a possible aid in psychotherapy. The experiment, carried on at Hillside and Manhattan

State Hospitals, is reported with case histories, clinical data on patient reactions and a historical review of dance movement and its role in therapy. The dance, like other forms of expression, can provide the opening wedge between therapist and patient.—G. Rubin-Rabson.

6198. Salvatore, Santo, & Hyde, Robert W. (*Boston Psychopathic Hosp., Mass.*) **Progression of effects of Lysergic Acid Diethylamide (LSD).** *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 50-59.—Observations made on 18 normal Ss for an 8-hour interval are reported. These responses follow a "step-like progression" from "gregariousness and anxiety and apprehension" in the first hour to the decline of all symptoms after the 6th hour. LSD symptomatology may accordingly be used either as "a means of observing and displaying curious 'pathological' phenomena or as a therapeutic aid in making defense mechanisms available for scrutiny to subject and therapist."—L. A. Pennington.

6199. Schletter, Edmund. **Some techniques used in psychotherapy with mental patients.** *Amer. J. indiv. Psychol.*, 1956, 12, 25-45.—The main objective is "to re-educate the patient by showing him that the reality of community living was not such a great threat to him, as he with his real or imagined inferiorities mistakenly felt. . . . The analyst's unlimited, though realistic optimism has to permeate the whole therapeutic relationship from the very beginning up to the termination of the treatment." The patient's "style of life" must be understood. Illustrating the advantages of the various techniques suggested are 3 brief case presentations. Both individual and group psychotherapy are discussed. 22 references.—A. R. Howard.

6200. Schneck, Jerome M. (26 West 9th St., New York.) **Dynamic hypnotic age regression.** *Amer. J. Psychiat.*, 1956, 113, 178.—The advantages of age regression to an indefinite past over experimental age regression are described and explained.—N. H. Pronko.

6201. Schneck, Jerome M. **Hypnoanalytic therapy with case illustrations.** *Amer. J. Psychother.*, 1956, 10, 536-541.—"This report consists of excerpts from hypnoanalytic interviews with three patients. The presenting problems were stuttering and anxiety, asthma and marital conflict, marital discord and depression. . . . The specific measures incorporated into treatment with these patients include hypnotic scene visualization, stimulated identifications, symbol interpretation, free association, transference analysis, post-hypnotic suggestion for nocturnal dreaming and recall, and spontaneous sensory phenomena."—L. N. Solomon.

6202. Shoobs, Nahume E. **Individual psychology and psychodrama.** *Amer. J. indiv. Psychol.*, 1956, 12, 46-52.—Adlerians can utilize psychodramatic techniques without subscribing to the philosophy of the Moreno school.—A. R. Howard.

6203. Smith, Kline & French Laboratories. **The treatment of hospitalized psychiatric patients with "thorazine."** (3rd ed.) Philadelphia, Pa.: Author, 1956. 24 p.—Thorazine (chlorpromazine, S.K.F.), administered to over 9,000,000 patients in the U. S. and considered in over 5,000 articles according to this edition of the monograph from the manufactur-

ing drug house, "favorably modifies most abnormal human behavior." Its scope in the psychiatric and some neurologic disorders and its relation to other psychiatric therapies are reviewed. It facilitates psychotherapy and accelerates recovery and rehabilitation of the hospitalized patient reducing relapse rate. Its use has favorably affected various aspects of mental hospital operations. Dosage, side effects, and contraindications are presented. 89 references.—C. T. Bever.

6204. Tausch, Reinhard, & Tausch, Anne-Marie. **Kinderpsychotherapie in nicht-directivem Verfahren.** (Non-directive psychotherapy with children.) Göttingen, Germany: Hogrefe, 1956. 138 p. DM 8.60.—The non-directive method is particularly suited for children who are overaggressive, antisocial, insecure, or disturbed in their capacity for concentration. It is also useful for children who are trouble-makers in school, are highly inhibited, or failing to progress according to their abilities. Moreover it is a valuable approach to many learning situations in both the classroom and the home. The 8 principles of the method are discussed, accompanied with illustrative excerpts from tape-recorded therapy sessions. 52 references.—E. W. Eng.

6205. Ware, Lucile M., & Prout, Curtis T. **A controlled study of Reserpine in the treatment of mental illness.** *J. nerv. ment. Dis.*, 1956, 123, 85-86.—Abstract and discussion.

6206. Weckowicz, T. E. **Reliability of Mecholyl Test.** *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 109-111.—Patients, regardless of diagnosis, who react to the intramuscular injection of Mecholyl by a marked fall in blood pressure have been found to respond favorably to electroshock. 20 patients are here repeatedly tested, morning and evening, in the effort to determine the reliability of the test. Findings indicated "no consistent diurnal variation . . . although some Ss changed their type of reaction." "The test appears to be quite reliable."—L. A. Pennington.

6207. Wendland, Leonard V. (*Rancho Los Amigos Hosp., Hondo, Calif.*) **Psychodynamic aspects of occupational therapy.** *Amer. J. occup. Ther.*, 1956, 10, 244-247.—A discussion of some of the more important interpersonal relationships involved between the occupational therapist and the patient, with emphasis on psychodynamics of the treatment situation and patient behavior.—M. A. Seidenfeld.

6208. Zierer, Ernest, & Zierer, Edith. **Structure and therapeutic utilization of creative activity.** *Amer. J. Psychother.*, 1956, 10, 481-519.—It is assumed that the perception of color interrelation is carried out simultaneously on a conscious and unconscious level and that on a preconscious level the color particles are interrelated by matching them with the intensity of internal stimuli. Beyond the culturally determined thematic orientation of a painting we find a more universal, unconsciously determined whole-part relationship: the relatedness in an integrated painting being the expression of the painter's positive contact with the object world and the unrelatedness in a disintegrated painting reflecting a denial of contact with the world of objects. Creative therapy utilizes these formulations and "push-tests" to gain therapeutic ends. Push-tests (designed to activate integrative energy and provoke aggression)

are discussed in detail. Twelve figures included.—*L. N. Solomon.*

(See also abstracts 5446, 5809, 6121, 6322, 6333, 6339, 6370, 6398, 6402, 6416, 6417, 6426, 6440, 6454, 6653, 6751, 6754)

CHILD GUIDANCE

6209. **Fredericksen, Hazel.** *The child and his welfare.* (2nd ed.) San Francisco, Calif.: W. H. Freeman & Co., 1957. x, 364 p. \$5.00.—Like the first edition, this is designed primarily as a text for undergraduate students, but it is also aimed toward the general reader. Major changes include: a new chapter on child development; revision of chapters on juvenile delinquency, religion and international social work with children; 3 cases illustrating probation, adoption and foster care; a list of films on child life; new bibliographies for each of the 25 chapters; list of publications of interest to child welfare workers.—*L. B. Costin.*

6210. **Gordon, Henrietta L.** *Casework services for children; principles and practices.* Boston, Mass.: Houghton Mifflin, 1956. xii, 493 p. \$5.50.—A discussion of those basic casework services for children whose parents need help in caring for them. Although aimed principally toward social work students and practitioners, it is also written for members of agency boards and community planning groups. These services are described: foster care, boarding home care, institutional care, adoption, day care, supervised homemaker service, protective service, and casework for children in their own homes. Case illustrations. Chapter bibliographies.—*L. B. Costin.*

6211. **Henriques, Basil.** *The home-menders; the prevention of unhappiness in children.* New York: John de Graff, 1955. 192 p. \$2.25.—On the basis of his experience directing Boys' Clubs, and as a magistrate in the East London Juvenile Court, the author has written this book for the general reader "not about criminals but about unhappy children who may easily become criminals if they are not treated correctly when they are young." The main cause of their unhappiness is seen to lie in the home. A program is described to correct such home conditions. In 12 chapters these topics are discussed: roles of mother and father in the home; broken homes; case work services for children; the juvenile court and the child; sex instruction and religion in the home; recruitment of youth leaders.—*L. B. Costin.*

6212. **Manor, Rahel.** *K'vutsa shel y'ladin bney 7-12 k'emtsai terapeuti.* (A group of 7-12 year old children as a therapeutic means.) *Ofakim*, 1956, 10, 254-260.—A description and theoretical explanation of the method used by the author. A free atmosphere in the educated group enables the educator to learn the difficulties of the children. The educational conditions in a kibuts give much more opportunity to a close personal contact with the children. The main sources are: Children's freely told stories, discussions, essays, drawings, individual talks with the children and their parents. Some examples illustrate the suggested method.—*H. Ormian.*

6213. **Paull, Joseph E.** *The runaway foster child.* *Child Welfare*, 1956, 35(7), 21-26.—The author suggests some diagnostic formulations of the

runaway problem and some case work concepts arising from them. He also explores the social case-worker's specific helpfulness to the runaway foster child. He points out the search for structure and the need for concrete procedures to help the child toward doing something about his own problem.—*S. M. Amatora.*

6214. **Redwin, Eleanore.** *Child guidance work with Adlerian techniques in Chicago.* *Amer. J. indiv. Psychol.*, 1956, 12, 70-77.—An account of the techniques employed in the Child Guidance Centers in Chicago.—*A. R. Howard.*

6215. **Schapiro, Michael.** *A study of adoption practice.* Vol. II. New York: Child Welfare League of America, 1956. 174 p. \$2.25.—Contains 22 papers representing these areas: psychiatry, anthropology, genetics, psychology, pediatrics, obstetrics, religion, law, and social work. Of special interest to psychologists are: A psychiatrist looks at adoption (Irene Josselyn); The natural parents (Ner Littner); Anthropology and adoption practice (H. L. Shapiro); The child's heritage (S. C. Reed); Hereditary factors affecting adoption (C. Stern); Genetics and adoption practices (R. C. Cook); Psychological assessment in infancy and very early childhood (B. R. McCandless); Evaluating an individual's capacity for parenthood (S. J. Beck); Adoption of children with special needs (H. M. Skeels); Mother & child—the first two years (C. Bradley); Jewish attitudes to child adoption (A. G. Duker); Teamwork in developing criteria for predictability (V. Yanekian); Evaluation of adoptive parents (A. J. Simon); Prediction—a realistic aspect of adoption practice (M. B. Loeb). (See 31: 3199).—*L. B. Costin.*

6216. **Shmueli, Eliezer.** *Miyun hanikhim v'yelts l'madrikhim ba "aliyat noar."* (Classification of educands and counseling for educators in "youth immigration.") *Ofakim*, 1956, 10, 175-180.—The Lasker Centre in Jerusalem is a counseling institution of the Youth Immigration Department of the Jewish Agency for Palestine in cases of disturbed children who need special treatment. The following moments in treatment are described and analyzed: Classification, diagnosis, counseling, directing the child to the counselor and its causes, the counselor's objective approach, the educator's problems, the counselor's associates, the contact between the counselor and the educand. One case is described as illustration.—*H. Ormian.*

6217. **Sobel, Louis H.** (Jewish Child Care Assoc., New York.) *Emerging patterns of child care services.* *J. Jewish communal Serv.*, 1956, 32, 440-450.—The author has stressed that the concept of foster home placement as a last resort procedure may indeed be erroneous. Placement, when properly administered and planned, may be positively and constructively beneficial in child care. "The best form of placement is that most likely to be helpful to a particular child." The importance of the placement environment contributing to the sound development of the child physically, mentally and socially is brought out as being important in the future programs where this will be closely linked to a broad program for improving institutional child care through improved staffing, better selection of personnel, more adequate facilities for the development of the child into a com-

petent, well-adjusted, community-oriented individual.
—M. A. Seidenfeld.

(See also abstract 5412)

VOCATIONAL GUIDANCE

6218. Becker, Howard S., & Carper, James. The elements of identification with an occupation. *Amer. sociol. Rev.*, 1956, 21, 341-348.—(See *Sociol. Abstr.*, 1957, 5, abs. 3192.)

6219. Blau, Peter M. (U. Chicago, Ill.), Gustad, John W., Jessor, Richard; Parnes, Herbert S., & Wilcock, Richard C. Occupational choice: a conceptual framework. *Industr. Labor Relat. Rev.*, 1956, 9, 531-543.—To achieve the purpose of setting up a systematic pattern for empirical research, out of which it may be possible at a future date to develop a theory of occupational choice, many of the varied factors influencing an individual's selection of an occupation are related in a conceptual framework by the authors, bringing together the economic, psychological, and sociological aspects of the process of job choice.—P. Ash.

6220. Blumental, Elhanan. (Hlth. Cent. Ha-dassah, Kiryat Yovel.) Sh'ifot miktsioyot shel noar ole. (Vocational aspirations of immigrant youth.) *Hahinukh*, 1955-56, 28, 377-381.—3 techniques were used, in order to study vocational aspirations of 50 boys and 70 girls, 14-18 years old, newcomers, inhabitants of Kiryat Yovel, on the outskirts of Jerusalem: weekly discussion groups, an open questionnaire, "test of jobs." Working immigrant youth in Israel face great difficulties in the transition period from school to work, and experience various frustrations in realizing their vocational needs. The studied group expressed their dissatisfaction in 3 directions: There is no career open to talents; recruitment to the Army impedes vocational training; unemployment hits the young immigrant more than the young Israel born. 4 practical steps in solving the problems are suggested.—H. Ormian.

6221. Graefe, Oskar. Zur Klassifizierung kindlicher Verhaltensstörungen. (Classification of behavior disorders in children.) *Psychol. Rdsch.*, 1956, 7, 1-9.—Since a general theory of personality has not been developed yet, it is not possible to give a causal catalog of children's behavior disorders. Nevertheless the attempt has been made to construct an approximated schema of the causes of behavioral disorders considering 11 empirically secured causal structures.—W. J. Koppitz.

6222. Hale, Peter, & Leonard, Regis J. (Duquesne U., Pittsburgh, Pa.) The Kuder Preference Record and the professional curriculum. *J. educ. Res.*, 1956, 50, 71-74.—The Kuder Preference Record was administered to students in 4 classes of College of Pharmacy. No significant differences were found among the different classes, indicating a stable interest pattern. With minor exceptions the results of this group were similar to those obtained for pharmacy students and pharmacists by other investigators.—M. Murphy.

6223. Johnson, Hildegard. (Iowa State Coll., Ames.) Fact and phantasy in vocational interest measurement. *J. educ. Psychol.*, 1956, 47, 40-46.—A critique of some present practices in the validation

of vocational interest inventories. The author points out some of the fallacies with respect to concurrent and predictive validity revealed in certain widely used tests. She points out the consequences of using for guidance purposes the results of inventories which do not successfully differentiate occupational groups from persons who are not employed in them, or which fail to predict vocational satisfaction.—F. Costin.

6224. Linder, Irene Christine. Some factors influencing women to choose church-related vocations: a study in occupational sociology. *Dissertation Abstr.*, 1956, 16, 1733-1734.—Abstract.

6225. Powers, Mabel K. (U. Minnesota, Minneapolis.) Permanence of measured vocational interests of adult males. *J. appl. Psychol.*, 1956, 40, 69-72.—For 109 males tested on the Strong VIB in 1931 and in 1941, permanence of interest was measured by (a) test-retest rank-order correlations over 44 occupational scales for each subject, (b) total score test-retest correlations for the 44 scales, (c) mean test-retest score difference for each scale, and (d) differences in group patterns from test to retest. "... vocational interests of adult males ... are remarkably stable when permanence is measured by the 4 methods. ..." —P. Ash.

6226. Sinnett, E. Robert. (U. Minnesota, Minneapolis.) Some determinants of agreement between measured and expressed interests. *Educ. psychol. Measmt.*, 1956, 16, 110-118.—Using data from an earlier study reported by Berdie (see 24: 5915) Sinnett analyzed some relationships between expressed and measured interests. "... the earlier an individual develops a realistic perception of the demands of a vocation, the more likely he would see himself realistically in this regard, using measured interests as criteria of realistic interests. ... The second hypothesis was that the more difficult it is to develop a realistic perception of a job ... the less similarity there would be between the way a person sees himself and measured interests." Both hypotheses were confirmed for the Strong but neither for the Kuder.—W. Coleman.

6227. Sluckin, W. Combining criteria of occupational success. Part II. *Occup. Psychol.*, 1956, 30, 57-68.—In this section (see 31: 3228), the author systematically examines the six kinds of methods that have been proposed for combining criteria without reference to other measures. These are: regarding criterion measures as different measures of the same entity, adding unweighted standard scores, weighting scores to equalize effective weights, weighting criterion measures by reference to judgments of experts, weighting criterion measures so as to maximize the reliability of the composite criterion, and the non-linear combination of criterion measures. None of the methods can be unequivocally recommended. 19 references.—G. S. Speer.

6228. Sommers, Vita S. (VA Regional Office, Los Angeles, Calif.) Vocational choice as an expression of conflict in identification. *Amer. J. Psychother.*, 1956, 10, 520-535.—Vocational choice is presented and discussed as a defensive struggle against and denial of identification. Three cases are presented which have in common a life-long struggle against identification with the parent of the same sex for whom they consciously felt violent hatred.—L. N. Solomon.

6229. Stauffacher, James C. **The vocational counselor in manual arts therapy treatment planning for patients.** *Amer. Arch. Rehab. Ther.*, 1956, 4, 145-148; 158-162.—An analysis of the functions of the vocational counselor, the common and the value of cooperative efforts of the vocational counselor and manual arts therapist in the rehabilitation program.—(Courtesy of *Rehab. Lit.*)

6230. Super, Donald E. (*Teachers Coll., Columbia U., New York.*) **The psychology of careers; an introduction to vocational development.** New York: Harper & Bros., 1957. x, 362 p. \$5.75.—This volume consists of 4 main subdivisions. Part 1 on the nature of work considers topics such as why people work, the varieties of work, and occupational life spans and output curves. In Part 2 the course and cycle of the working life are described. Part 3 deals with the dynamics of vocational development including such topics as aptitudes, interests, personality, the family, economic factors, and disabilities in vocational development. Finally, in Part 4 the author discusses implications and applications under the headings of vocational adjustment and general adjustment, and methods and techniques of vocational psychology and guidance. Recommended readings.—V. M. Staudt.

6231. Witkin, Arthur Aaron. **The prediction of potentials for effectiveness in certain occupations within the sales field.** *Dissertation Abstr.*, 1956, 16, 1718.—Abstract.

6232. Young, Michael, & Willmott, Peter. **Social grading by manual workers.** *Brit. J. Sociol.*, 1956, 7, 337-345.—This East London study finds a considerable measure of dissensus amongst the sample of manual workers who ranked occupations in contrast to the consensus in the Hall-Jones and other studies.—R. M. Frumkin.

(See also abstracts 6021, 6084, 6659)

BEHAVIOR DEVIATIONS

6233. Abély, Paul. **Les névroses et les psychoses du post-abortum; leur importance et leur influence.** (Post-abortion neurosis and psychosis: their importance and frequency.) *Ann. Méd. Psychol.*, 1956, 1, 399-408.—Abortion being always a traumatic experience is often the unsuspected cause of sudden psychoneurotic incidents or atypical psychotic breaks. These "pseudo schizophrenic" episodes are similar to those found in post-partum psychosis and are treated in the same manner: the author recommends the use of pneumoencephalograms followed, after a week, by 3 electroshocks.—M. D. Stein.

6234. Asher, Richard. **Nerves explained; a straightforward guide to nervous illnesses.** London, England: Faber & Faber Ltd., 1957. 150 p. 10s. 6d.—The first section of this book explains "nerves" and presents a simple classification of nervous illness. Section 2 is devoted to the psychoses and section 3 to the psychoneuroses. The final section deals with nerves in everyday life.—C. Tague.

6235. Barry, Herbert Jr. **Month of birth as related to psychiatric conditions.** *J. nerv. ment. Dis.*, 1956, 124, 208-209.—Abstract and discussion.

6236. Berne, Eric. **A laymen's guide to psychiatry and psychoanalysis.** New York: Simon &

Schuster, 1957. xxi, 320 p. \$1.50.—"An extensively revised and updated edition of 'the mind in action' (see 23: 2289). Part 1, Normal development, considers the following topics: what people have to work with, what people are trying to do, the growth of the individual, and dreams and the unconscious. Part 2, Abnormal development, treats of the neuroses, the psychoses and alcohol, drugs and some behavior disorders. Part 3, Methods of treatment, discusses psychiatric treatment and psychoanalytic treatment. Appendices include a section on matters beyond science and another on psychiatric drugs such as the tranquilizers. Glossary.—N. H. Pronko.

6237. Beutner, Karl R., & Hale, Nathan G. **Emotional illness: how families can help.** New York: Putman, 1957. 158 p. \$2.75.—Anger, guilt, hostility and fear in the emotionally ill are explained in simple language to help families understand and aid sick relatives. The forms fear takes and acts of fear are described. The value of expressing irritations that occur in all close relationships, and the importance of not doing more than what a person really wishes to do are stressed. Selecting a psychotherapist, physical treatment, hospitalization, the need of overcoming one's own difficulties before helping others, and problems of recovery are discussed.—G. K. Morlan.

6238. Blain, Daniel. **Zonal delimitation of psychiatric services—an answer to personnel shortages.** *Amer. J. Psychiat.*, 1956, 113, 176-177.—The population is categorized into four zones with the thought that the concept might prove useful as a frame of reference by not only delimiting responsibility for psychiatric services but also as a framework in planning research and programs for mental health and prevention.—N. H. Pronko.

6239. Brain Research Foundation. **Blood tests in mental illness; papers and discussions presented at the Annual Scientific Conference of the Brain Research Foundation, Chicago, Ill., January 12, 1957.** Chicago, Ill.: Author, 1957. 47 p.—"The 1957 Scientific Conference of the Brain Research Foundation provided an opportunity for those interested in Dr. Akerfeldt's work and engaged in similar studies to consider his findings, compare them with their own and consult together regarding the relation between certain disorders of body chemistry and mental disease." This is a report of that conference.—N. H. Pronko.

6240. Brown, Natalie L. **A study of sensory, motor, and ideational perseveration of schizophrenic and diffuse brain damaged patients.** *Dissertation Abstr.*, 1956, 16, 1500-1501.—Abstract.

6241. Coulonjou, Roger. **Psychiatrie pratique.** (Practical psychiatry.) Paris: G. Doin & Cie., 1956. 254 p. 1850 fr.—Intended not only for specialists but for all medical practitioners who may not recognize the neuroses that underlie the more obvious symptoms. This book provides in detail the guidance and knowledge needed: it points out the less obvious factors, the principal psychic and neurotic signs, and the mental difficulties resulting from physical illnesses.—M. M. Gillet.

6242. Croog, Sydney H. **Patient government—some aspects of participation and social background on two psychiatric wards.** *Psychiatry*, 1956,

19, 203-207.—Patient government was instituted in 2 wards including 74 patients in the Veterans Hospital at West Haven, Conn. This is a report on participation with special reference to age of patients, ethnic origins (table 1) and occupational backgrounds (table 2). Some concluding comments point up the small percentage of participant patients and raise basic questions of its usefulness and dangers for further investigation.—C. T. Bever.

6243. Cumming, Elaine; Clancey, I. L. W., & Cumming, John. Improving patient care through organizational changes in the mental hospital. *Psychiatry*, 1956, 19, 249-261.—In a 2,000 bed state-supported mental hospital changes were instituted in the organizational structure, in accordance with findings in the industrial-sociological field, with a view towards rehabilitation of chronic patients and treatment of new patients. The details of administrative reorganization are set forth, which especially pertained to the nursing hierarchy: an expanded executive echelon, firmer lines of formal communication, strengthening the authority of the Nursing Officer in the training staff with doctors in authority over Nursing Officers, and administrative integration of male and female nursing services. The resulting changes in attitude fostered higher morale, improved patient care, and fundamentally altered the basically pessimistic "custodialism" of the nursing staff.—C. T. Bever.

6244. Dunne, John. (U. Coll., Dublin, Eire.) The contribution of the physical sciences to psychological medicine. *J. ment. Sci.*, 1956, 102, 209-220.—Successful functioning of mind depends on the integrity of a complex combination of reflex arcs, the production of various substances which affect the nervous mechanism, the generation of electrical potential, the electrical mechanism for communication, and a compartmentalization for reception and storage of data. The therapist does not deal with the soul but with mental mechanisms which have failed to work properly.—W. L. Wilkins.

6245. Engel, Frank L. (Duke U., Durham, N. C.) Application of endocrine methods in the field of psychiatric research. *Psychiat. Res. Rep.*, 1956, No. 3, 1-3.—A review of the methods and areas of investigation is given.—L. A. Pennington.

6246. Ewalt, Jack R., Strecker, Edward A., & Ebaugh, Franklin G. Practical clinical psychiatry. (8th ed.) New York: McGraw-Hill, 1957. xiv, 457 p. \$8.00.—Written for the medical student and practitioner, the present edition (see 26: 4085) differs from previous ones in devoting more space to theory and less to presentation of case studies. New information on psychoanalysis has been added as well as a chapter on the prevalence of mental illness. The present volume is organized into 3 sections, the first of which deals with psychobiological theory. Part II considers a description of the various illnesses and additional material concerning their causes. Part III discusses various types of therapy in common use. A chapter on child psychiatry has changed authorship from Leo Kanner to Warren Vaughan.—N. H. Pronko.

6247. Fisher, Millard G. The prediction of assaultiveness in hospitalized mental patients. *Dissertation Abstr.*, 1956, 16, 1277.—Abstract.

6248. Freudenberg, R. K., & Robertson, J. P. S. Symptoms in relation to psychiatric diagnosis and treatment. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 14-22.—The goal has been to determine whether, with 51 schizophrenic, 19 depressive, and 23 neurotic patients, those showing a good therapeutic response and those showing a poor one differed significantly in psychiatric symptoms before initiation of treatment. Administration of the Wittenborn rating scales and of the Minnesota Multiphasic Personality Inventory, along with other scales, provided the data for analysis. Results indicated a striking overlap of symptoms in the 3 diagnostic categories. There are differences—with reference to treatment—that suggest the need for further study by "a dimensional approach" to diagnosis. Critical evaluation of the Wittenborn Scales and the MMPI is also given.—L. A. Pennington.

6249. Gillin, John. The making of a witch doctor. *Psychiatry*, 1956, 19, 131-136.—The curandero is the Indian curer of "magical fright" in Eastern Guatemala. The early life of a curandero and his acquisition of magical powers is described.—C. T. Bever.

6250. Hare, E. H. (Warrington Park Hosp., Surrey, Eng.) Mental illness and social conditions in Bristol. *J. ment. Sci.*, 1956, 102, 349-357.—All cases over a five year period were studied; while distribution of neurosis, senile dementia and manic-depressive psychosis was as expected, the distribution of schizophrenia was abnormal, being related to the number of people living alone. It is suggested that social isolation is a causal factor or that there is a segregation in certain areas of persons liable to schizophrenia. 22 references.—W. L. Wilkins.

6251. Hill, Denis. (Maudsley Hosp., London, Eng.) Clinical applications of EEG in psychiatry. *J. ment. Sci.*, 1956, 102, 264-271.—For most research and diagnostic purposes activating techniques, such as the application of stimuli, pharmacological, physiological, or psychological, which cause known alterations of EEG in the normal, should be used.—W. L. Wilkins.

6252. Hoff, Hans. (U. Vienna, Austria.) Lehrbuch der Psychiatrie; Verhütung, Prognostik und Behandlung der geistigen und seelischen Erkrankungen. (Principles of psychiatry; prevention, prognosis and treatment of mental illness.) Basel: Benno Schwabe & Co., 1956. xv, 922 p. Sw. Fr. 56.00.—In a series of 36 lectures, in 2 volumes, Prof. Hoff and 6 co-workers (G. Benedetti, R. Brun, M. Gschwind, H. Krayenbühl, H. Meng, and W. A. Stoll) present an outline of general psychiatry, child psychiatry, mental hygiene, psychological evaluation, psychotherapy, psychosurgery, and forensic psychiatry. While dynamic psychiatry is the core concept, anatomical, biological, physiological, psychopathological, genetic, and constitutional research are also considered. 12-page bibliography.—H. P. David.

6253. Jung, C. G. Psychiatric studies. New York: Pantheon Books, 1957. xiii, 269 p. \$3.75.—Vol. I of Jung's Collected Works in the Bollingen Series. A collection of early studies in descriptive psychiatry: On the psychology and pathology of so-called occult phenomena; On hysterical misreading; Cryptomnesia; On manic mood disorder; A case of hysterical stupor in a prisoner in detention; On simu-

lated insanity; A medical opinion on a case of simulated insanity; A third and final opinion on two contradictory psychiatric diagnoses; On the psychological diagnosis of facts.—E. W. Eng.

6254. Keehn, J. D., & Sabbagh, Aimee. (American U., Beirut, Lebanon.) **Colour-form response as a function of mental disorder.** *J. ment. Sci.*, 1956, 102, 319-323.—On seven color-form tests administered to mental defectives, epileptics and schizophrenics validated the previous finding that schizophrenics responded more to color than normals, but also showed that the mental defectives and the epileptics were even more color responsive. 23 references.—W. L. Wilkins.

6255. Kern, Elta N. **Psychological and emotional aspects of diseased or injured persons.** *Phys. Ther. Rev.*, 1956, 36, 302-314.—A discussion of the emotional, psychological, economic and social problems of the sick or injured, the differences in problems of children with congenital or acquired disabilities and those of disabled adults, society's responsibility for rehabilitation of the handicapped, and the right hospital atmosphere for helping patients adjust to their problems. Implications for the physical therapist in questions covered in the study are discussed. Particular diseases and handicaps discussed are tuberculosis, paraplegia, cerebral palsy, and poliomyelitis.—(Courtesy of Rehab. Lit.)

6256. Kramer, Morton; Goldstein, Hyman; Israel, Robert H., & Johnson, Nelson A. **Application of life table methodology to the study of mental hospital populations.** *Psychiat. Res. Rep.*, 1956, No. 5, 49-76.—Illustration of a method of statistical analysis appropriate to the study of the flow of patients through the mental hospital is given. Pp. 77-87 present the discussion following the presentation of this paper.—L. A. Pennington.

6257. Kunz, Hans. **Die latente Anthropologie der Psychoanalyse.** (The latent anthropology of psychoanalysis.) *Schweiz. Z. Psychol. Anwend.*, 1956, 15, 84-102.—By latent anthropology of psychoanalysis is meant that aspect of psychoanalysis which serves as basis and guiding principle in our understanding of man. In contrast to the usual concept of human nature which creates its existence on the basis of freedom of decision Freud has rediscovered the original nature of man which is predominantly unconscious. English and French summaries.—K. F. Muenzinger.

6258. Leach, Max. (Abilene Christian Coll., Abilene, Texas.) **Christianity and mental health.** Dubuque, Iowa: Wm. C. Brown & Co., 1957. 135 p.—The author maintains that belief and practice of Christianity bring a high level of happiness or mental health. Common classifications of mental illness are briefly described. Christian faith and love provide security against many fears in the atomic world. The best conditioning is Christian, and the reduction of frustration comes from accepting what can't be changed. The neurotic must become interested in things outside himself and see that security is a spiritual matter. Since the Christian believes there is an ultimate purpose in life, his own life has purpose.—G. K. Morlan.

6259. Lundbye, Ove. **What is the aim of mental hygiene?** *World ment. Hlth*, 1956, 8, 81-84.—

The psychiatric definition of mental health as "being free from any mental disease" evades the problem. The "sociologist and social psychologist are in danger of looking on man as being merely a member of a group, striving only to keep himself adapted." A proper definition must be universal, objectively demonstrable, clear, and plain. The author offers this definition as meeting these requirements: "The mentally healthy person is one who is developing towards personal maturity. Maturity is reached in the same degree as the individual can independently and in a fruitful way overcome his internal conflicts, realize his own aims in life and responsibly live in fellowship with others."—J. C. Franklin.

6260. McCartney, James L. **The practice of psychiatry around the world.** *A.M.A. Arch. Neurol. Psychiat.*, 1956, 75, 648-658.—A description is given of the state and private psychiatric facilities in 30 countries. These observations are contrasted with data available 30 years ago. It is concluded that "there is an increase in mental illness throughout the world; there is a universal shortage of properly trained psychiatrists; the organic approach is on the ascendancy, whereas the art of psychotherapy is on the descendancy; and the progress of a nation's psychiatry is a good index of the country's stability."—L. A. Pennington.

6261. Malmö, Robert B. (McGill U., Montreal, Can.) **Symptom mechanisms in psychiatric patients.** *Trans. N. Y. Acad. Sci.*, 1956, 18, 545-549.—The thesis is presented that "anxiety may be accounted for in terms of deficiency in the inhibitory part of the NPS" [nonspecific projection systems]. The theory is largely founded on findings from objective studies of psychiatric patients. Among other things, these studies have shown: (1) "Under standard conditions of stimulation psychoneurotics are more reactive than controls, and . . . patients with anxiety predominating in the symptom picture are the most responsive of all." (2) "In differentiating between patients and controls, some form of stimulation was definitely superior to merely taking records under resting conditions." 15 references.—P. Swartz.

6262. Mezer, Robert R. **Dynamic psychiatry in simple terms.** New York: Springer Publishing Co., 1956. xi, 174 p. \$2.50.—A series of lectures presented to medical students and psychiatric nurses forms the substance of this nontechnical presentation of psychiatry. Part I deals with the assessment of the patient. Part II considers psychosexual development, the Oedipus complex and the developmental anatomy of the personality. Part III discusses illnesses of the personality and Part IV an over-all view of the normal life.—N. H. Pronko.

6263. Milne, James. (Haxokhead Hosp., Glasgow, Scotland.) **Voluntary service and the mental hospital.** *World ment. Hlth*, 1956, 8, 64-70.—Volunteer committees of laymen working with the staff "establish warm personal relationships with patients" and provide "amenities not easily obtained from public funds." Work with chronic patients is of first importance. "The effect on the hospital has been outstanding. The patient is constantly reminded that he is a valuable member of a friendly community." Moreover, "the danger of desocialization is minimized and progressive reintegration into the outside community is smoother."—J. C. Franklin.

6264. Noveck, Simon. (Ed.) *Judaism and psychiatry; two approaches to the personal problems and needs of modern man*. New York: Basic Books, 1956. xi, 197 p. \$3.95.—Part I discusses certain basic problems in personal living, i.e., guilt, anxiety, depression, self-acceptance, and grief, from a Jewish and psychiatric view. Part II discusses "psychological values of Judaism": religious experience and education, the need to believe and to belong, the value of ritual, and Jewish neuroses. Part III asks, "Can Judaism and psychiatry meet?" Contributors are psychiatrists, analysts, rabbis.—A. Eglash.

6265. O'Day, Edward Francis, Jr. *Differential success of neuropsychiatric patients in predicting the self-ratings of other persons*. *Dissertation Abstr.*, 1956, 16, 1720.—Abstract.

6266. Omaru, Isamu, & Naka, Syuzo. *Present status of mental health in Japan*. *World ment. Hlth*, 1956, 8, 85-86.—"It is estimated that there are now in Japan about 1,260,000 mental patients (1.44 percent of the total population), of whom about 430,000 are in need of hospital treatment for the sake of social security." Increases in neuroses reflect "Japan's social instability resulting from her political and economic difficulties." A particular problem introduced during World War II is "the wide prevalence of intoxication by amine stimulants," the number of users being estimated at about a million.—J. C. Franklin.

6267. Orgel, Sidney Arthur. *Clustering of verbal associates in schizophrenia and chronic brain syndrome*. *Dissertation Abstr.*, 1956, 16, 1720-1721.—Abstract.

6268. Pollak, Otto. *Staff discomforts and the social organization of a mental hospital*. *Psychiatry*, 1956, 19, 309-314.—At Spring Grove State Hospital, Maryland, staff frustrations in this special type of social organization were investigated. The method of this inquiry is described. The findings of role complexities, of communication difficulties, of conflicts of professional philosophies and their implications are discussed with suggestions for further research.—C. T. Bever.

6269. Post, Felix. (Maudsley Hosp., London, Eng.) *Body-weight changes in psychiatric illness; a critical survey of the literature*. *J. Psychosom. Res.*, 1956, 1, 219-226.—Review of the experimental literature indicates that this problem has received little attention. Clinical evidence, on the other hand, suggests that body-weight changes can thus far be more simply accounted for on the grounds of change in eating habits and in disturbances of appetite. 27 references.—L. A. Pennington.

6270. Rado, Charles. "Oedipus the King." *Psychoanal. Rev.*, 1956, 43, 228-234.—"In the beginning there is the sexual act of the parents (4 legs); from the embrace of the parents is born the child (2 legs); grown to maturity, the boy develops a third (sexual) member (3 legs)." According to Rado, the foregoing interpretation explains fully and convincingly the Riddle of the Sphinx. Sophocles wrote his self-analysis for an audience very familiar with the original myth and repressing the incest drive. Hence Oedipus had to be punished for the transgression and moral principles had to be rededicated. This served as catharsis for the audience.—D. Prager.

6271. Rickman, John. *Selected contributions to psycho-analysis*. New York: Basic Books, 1957. 411 p. \$7.50.—The 23 papers, compiled by W. Clifford M. Scott, demonstrate the development of the author's thought over a period of 30 years. The subject-matter of the papers embraces a wide range of psychoanalytical topics, from the Freudian beginnings to the consideration of "Role and future of psychotherapy. . . ." A "Table of psychological mechanisms showing their relation to mental disorders" and a 102-item bibliography are included.—M. Antalfy.

6272. Schwartz, Herman S. *Home care for the emotionally ill*. Elmhurst, N. Y.: Sessions Publishers, 1957. xxii, 234 p. \$5.00.—The author discusses in non-technical language whether or not to care for some one mentally ill at home, the help that would be needed, importance of harmonious relations and understanding, relaxing, simple home remedies, coaxing appetites, work and play, use of suggestion, spiritual aid, care of the neurotic, the alcoholic, the chronic, the aged, and the importance of not giving up hope.—G. K. Morlan.

6273. Steinberg, Hannah. (U. Coll. London, Eng.) *'Abnormal behaviour' induced by nitrous oxide*. *Brit. J. Psychol.*, 1956, 47, 183-194.—"Psychological changes induced in normal volunteers by inhalations of nitrous oxide are described. Some of these changes resembled psychiatric symptoms, for example illusions and hallucinations, perseverations, and 'dissociated' states. There was no relation between individual differences in the number of changes reported, ratings for emotional stability, and cognitive impairment attributable to the drug. Possible relations between normal, drug-induced, and other forms of abnormal behaviour are discussed." 35 references.—L. E. Thune.

6274. Weber, John J. *Some observations on psychiatric residency supervision*. *Psychoanal. Rev.*, 1956, 43, 214-219.—The language and focus of Rado's adaptational theory help residents to get a firmer footing. The supervisor tries to help the resident (1) see areas in which the patient has functioned well as well as areas in which he has not, (2) appraise the emotional life of the patient, (3) estimate the patient's ability to adapt in work, sex, and interpersonal relations as well as to the ward. The supervisor avoids technical terms and tries to give the resident something to which he could relate in his own emotional life. There is a national trend among residents to scorn anything but psychoanalysis as superficial or supportive. It is not necessary to be a psychoanalyst to reach a high level of understanding and therapeutic skill.—D. Prager.

6275. White, Kerr L. *Interdisciplinary research, with some special reference to cardiovascular research*. *Psychiat. Res. Rep.*, 1956, No. 3, 15-18.—Strengths and weaknesses operative in current methods of research applied to psychiatric problems are described. Suggestions are made for improvement in methodology in this joint approach.—L. A. Pennington.

6276. World Health Organization. *Expert Committee on Psychiatric Nursing. First report of the . . . Wld Hlth Org. techn. Rep. Ser.*, 1956, No. 105. 44 p.—Because psychiatric care has evolved from confinement of the patient to protect the com-

munity to his care and rehabilitation, psychiatric nursing is increasingly less custodial and more therapeutic in outlook and function. The report deals with this trend in terms of the selection, training, and work of psychiatric nurses all considered from a number of technical, social, and interpersonal viewpoints.—J. C. Franklin.

(See also abstract 5868)

MENTAL DEFICIENCY

6277. Benoit, E. Paul. (U. Illinois, Urbana.), & Wallace, Robert E. A philosophy of discipline; a positive approach to discipline for the mentally retarded in a large residential school. *Amer. J. ment. Defic.*, 1956, 61, 24-33.—The aim of restriction is described as always being training and never punishment. Socially acceptable habits are generated by means of preventive techniques and rewards. The author states that "It is the duty of parents and parent surrogates to check anti-social behavior by using unpleasantness to condition children and adults of low mentality to exhibit forms of behavior that are beyond their understanding, but which they must learn if they are to live in our society and thereby achieve their fullest measure of development." 22 references.—V. M. Staudt.

6278. Bettag, Otto L., Slight, David; Wenig, Phillip W., & Sorensen, William H. Caring for the mentally deficient of Illinois. *Amer. J. ment. Defic.*, 1956, 61, 38-42.—It is stated that the State institutional mentally deficient population in Illinois is increasing three times faster than the general population. First admissions, deaths, and resident population are discussed.—V. M. Staudt.

6279. Boly, Louis F., & Cassell, John T. An exploratory on-the-job training program for the institutionalized mentally retarded. *Amer. J. ment. Defic.*, 1956, 61, 105-112.—"A rationale for an institutional on-the-job training program, emphasizing the development of desirable methods of behavior rather than the mastery of specific vocational skills, is presented in this paper. An exploratory program, based on this orientation, is described with illustrations of evaluative and therapeutic techniques being included. Case examples from the writers' experience are cited as evidence of the value of such an integrated classroom and morning work experience program."—V. M. Staudt.

6280. Cantor, Gordon N. (George Peabody Coll. Teachers, Nashville, Tenn.) A note on a methodological error commonly committed in medical and psychological research. *Amer. J. ment. Defic.*, 1956, 61, 17-18.—This paper criticizes a study done by J. P. Lombard et al. (see 30: 4795). Cantor states that the conclusion reached by the authors, namely that, "... the feeding of glutamic acid to high grade mentally retarded children results in no more improvement in general intelligence ... than the feeding of a placebo to a comparable group" is not justified on the basis of the statistical analyses which they presented. A reply to Cantor's criticism by Lombard et al. immediately follows this critical note, on p. 19.—V. M. Staudt.

6281. Cruickshank, William M. (Syracuse U., N. Y.) Planning for the severely retarded child.

Amer. J. ment. Defic., 1956, 61, 3-9.—The assignment of the problem of training the severely retarded to the public schools is questioned by the author. He feels that "There is no social progress or advancement possible through the public day school program for the severely retarded." In ruling out public education for this group he urges extension of programs by residential schools and community day care centers.—V. M. Staudt.

6282. Dexter, Lewis A. Towards a sociology of the mentally defective. *Amer. J. ment. Defic.*, 1956, 61, 10-16.—Three needs are described: a need for a sociology of those who study mental deficiency, a need for a sociology of those who work in institutions, become clinicians, etc., and a need to see mental defectives in terms of the general theory of social problems. Formal education and its effect on the role and behavior of mental defectives are discussed.—V. M. Staudt.

6283. Flescher, Irwin. Needle trades opportunities for the mentally retarded. *Amer. J. ment. Defic.*, 1956, 61, 113-116.—Evaluation of both the favorable and unfavorable conditions "suggests the needle trades industry as a fertile area for increased penetration by workers who are intellectually deficient." The author feels that research in the future "should tap employer attitudes and cooperation. Follow-ups of referrals of retarded workers in this industry should be investigated."—V. M. Staudt.

6284. Galazan, Michael M. Coordination and integration of services for the mentally handicapped—private agency. *Amer. J. ment. Defic.*, 1956, 61, 43-45.—The Jewish Vocational Service is discussed in terms of the services which it renders in Milwaukee, Wisconsin, to the mentally handicapped.—V. M. Staudt.

6285. Gibson, Robert. (Manitoba School, Portage la Prairie, Can.) Familial idiopathic methaemoglobinemia associated with oligophrenia. *Amer. J. ment. Defic.*, 1956, 61, 207-209.—The author reports that the association of familial idiopathic methaemoglobinemia with oligophrenia has been noted previously. He describes in this paper a family "where the mother, a mental defective of moron or feeble-minded grade and married to her father's brother, has three children of this union." Two siblings have familial idiopathic methaemoglobinemia, of these one is mentally defective. The other is mentally normal, as is the third child.—V. M. Staudt.

6286. Golden, Beverly. A comparison of the distractibility of intellectually normal and mentally retarded subjects. *Dissertation Abstr.*, 1956, 16, 1718-1719.—Abstract.

6287. Goodman, Melvin B. A prevalence study of mental retardation in a metropolitan area. *Amer. J. publ. Hlth*, 1956, 46, 702-707.—A report of some of the findings of the initial phase of a survey of mental retardation in Onondaga County, New York, conducted by the Community Mental Health Research Unit of the New York State Mental Health Commission. The two main findings revealed by the study were that "mental retardation" is not a fixed characteristic of individual children, but a "complex set of manifestations of some children's relationship with their immediate environment. The data of this survey indicate that this relationship ceases to exist

spontaneously in many children after the age of 14. . . . Secondly, I.Q. scores are unevenly distributed among children reported as retarded, many having scores over 75 and some over 90.—(Courtesy of *Rehab. Lit.*)

6288. Gordon, Edmund W. (*Jewish Hosp., Brooklyn, N. Y.*), & Ullman, Montague. **Reactions of parents to problems of mental retardation in children.** *Amer. J. ment. Defic.*, 1956, 61, 158-163.—On the basis of data obtained over a period of 5 years and a recent exploratory study the authors discuss parental reactions to problems of mental retardation under the following headings: complaints the parents have relative to professional help and guidance; ignorance concerning the nature of the disturbance and the consequent limited ability to plan effectively; clarification of the realistic social, family, and personal problems; the neurotic problems and the response of the parents to the group experience.—V. M. Staudt.

6289. Hanhart, E. (*U. Zurich, Switzerland.*) **Die Schweizer Fälle von Splenohepatomegalie (Niemann-Pick).** (Swiss cases of Niemann-Pick's disease.) *Acta genet. med. gemellolog.*, 1956, 5, 294-318.—6 Swiss families with children afflicted with Niemann-Pick's disease were studied. "The facts found by us and others clearly speak in favor of a simple-recessive transmission, at least for the infantile form of Niemann-Pick's disease." These findings are in conformity with the author's study of Tay-Sach's disease (infantile amaurotic idiocy). The similarity between the Niemann-Pick and Tay-Sach's syndromes is discussed. 72-item bibliography. Italian, French, and English summaries.—D. A. Santora.

6290. McCartney, Louise D. (*Steele Sch., Denver, Colo.*) **Helping mentally deficient children of the exogenous type showing central nervous system impairment to make better social adjustments.** *Amer. J. ment. Defic.*, 1956, 61, 121-126.—The characteristics of these children which make social adjustment hard are described along with some techniques and procedures in structuring social adjustments.—V. M. Staudt.

6291. McCartney, Louise Dawley. (*Denver Pub. Sch., Colo.*) **A program of motor therapy for young mentally deficient children of the non-familial type.** *Train. Sch. Bull.*, 1956, 53, 98-105.—A remedial program brought about motor and social changes in the children, as reflected in Oseretsky scores and general behavior.—W. L. Wilkins.

6292. Murphy, Mary Martha. (*State Colony, Woodbine, N. J.*) **Comparison of developmental patterns of three diagnostic groups of middle grade and low grade mental defectives.** *Amer. J. ment. Defic.*, 1956, 61, 164-169.—A group of Mongolians was compared with two equated groups of brain injured and familial mental defectives in respect to verbal production and concrete performance. (1) All 3 groups had developed equally in verbal and performance areas rather than outstandingly in one. (2) The average developmental levels of the Mongolian and the brain injured groups were similar quantitatively and also inferior to that of the familial group in verbal and concrete performance. (3) The Mongolian pattern of development was qualitatively more like that of the familial group than that of the

brain injured group. (4) The verbal and concrete performance abilities of the Mongolian group were limited to a narrower range than those of the other groups. (5) The author states that the results seem to support Benda's theory which classifies Mongolism in the exogenous etiological group "as the result of an improperly developed or damaged pituitary gland during the fetal period causing severe retardation of intellectual development rather than arrested development at a certain mental age as is the case with many brain injured individuals.—V. M. Staudt.

6293. Schonell, Fred J. & Watts, B. H. **A first survey of the effects of a subnormal child on the family unit.** *Amer. J. ment. Defic.*, 1956, 61, 210-219.—From this survey of the effects of a subnormal child on the family unit it seems that effects of an economic, social or emotional kind may become apparent. The problem of the subnormal child is not an individual matter but a problem of the whole family unit.—V. M. Staudt.

6294. Stadler, H. E. (*Muscatatuck State Sch., Butlerville, Ind.*), Meyer, Hans, & Leland, Henry. **Phenylpyruvic oligophrenia in a mulatto.** *J. nerv. ment. Dis.*, 1956, 124, 205-207.—Case history and laboratory and psychological data are presented of a 27-year-old blond haired and blue eyed mulatto showing phenylpyruvic oligophrenia. The case is thought to show a probable genetic linkage (pleiotropic effect) between albinism and phenylketonuria.—N. H. Pronko.

6295. Vail, David. (*215 East Biddle St., Baltimore, Md.*) **Mental deficiency: response to milieu therapy.** *Amer. J. Psychiat.*, 1956, 113, 170-173.—Experiences with adolescent and early-adult men and women patients, mostly in the moron range, are described as these patients were prepared for successful adjustment to conditions of life outside the institution.—N. H. Pronko.

6296. Winthrop, Henry. (*Hollins Coll., Va.*) **Psychological and economic factors governing the industrial utilization of the mentally defective learner.** *Amer. J. ment. Defic.*, 1956, 61, 181-190.—The author attempts to show the bearing of economic factors and psychological factors on the problem of the industrial placement of the mental defective.—V. M. Staudt.

6297. Wolfson, Isaac N. **Follow up studies of 92 male and 131 female patients who were discharged from the Newark State School in 1946.** *Amer. J. ment. Defic.*, 1956, 61, 224-238.—This study reviews the histories of a group of patients, and the information on their adjustment following the 7 or 8 year period after their discharge.—V. M. Staudt.

6298. Young, Milton Abraham. **Academic requirements of jobs held by the educable mentally retarded in the state of Connecticut.** *Dissertation Abstr.*, 1956, 16, 1620-1621.—Abstract.

6299. Zulliger, Hans. **Un cas de pseudo-débilité.** (A case of pseudo-feeble-mindedness). *Rev. Psychol. appl.*, 1956, 6, 161-177.—The case history and test protocols of a 16-year-old boy are presented to illustrate how one can distinguish true intellectual deficits from cases where there is an internal blocking. Basing the judgment largely on results of the Rorschach and Behn-Rorschach, psychotherapy was recommended for the boy in 1952. By 1954, he passed the

entrance examination for a lycée.—*W. W. Wattenberg.*

(See also abstracts 5832, 6069, 6163, 6254, 6635, 6640, 6641, 6646)

BEHAVIOR PROBLEMS

6300. **Armstrong, John J., & Gibbins, Robert J.** (*U. Toronto, Canada.*) **A psychotherapeutic technique with large groups in the treatment of alcoholics; a preliminary report.** *Quart. J. Stud. Alcohol*, 1956, 17, 461-478.—In a group in existence since 1951, a year's sample of content and interaction for the third year suggests an advantage for even a loosely organized group in that the patient who has to reject authority figures can identify. Self-management by the group is really good and the group selects those who can profit by the discussions. Interaction is partially under the control of the therapist.—*W. L. Wilkins.*

6301. **Bartsch, Edith.** **Beitrag zur Ätiologie der Trichotillomanie im Kindesalter.** (Contribution to the etiology of trichotillomania in childhood.) *Psychiat. Neurol. med. Psychol., Leipzig*, 1956, 8, 173-182.—Hair-pulling and hair-eating were studied in 16 children, some intellectually defective, others normal. Trichotillomania, considered a symptom and not an illness, was found unrelated to age, sex, or time of day. Compulsive as well as drive forces of subcortical origin express themselves in this motor discharge. Prolonged psychiatric care and correction of the social field in conflict situations yielded disappointing treatment results pointing up the deep roots of the symptom. Russian summary. 44 references.—*C. T. Bever.*

6302. **Berrington, W. P.** (*Downshire Hosp., Downpatrick, Northern Ireland.*), **Liddell, D. W., & Foulds, G. A.** **A re-evaluation of the fugue.** *J. ment. Sci.*, 1956, 102, 280-286.—In 37 cases of fugue, 24 had multiple and 13 single episodes; severe head injury was found in 16 and doubtful in 3. Hysterical features were common but obsessive rare. It is suggested that the emotional component is chiefly depressive.—*W. L. Wilkins.*

6303. **Boshes, Benjamin; Sewall, Lee G., & Koga, Mary.** **Management of the narcotic addict in an outpatient clinic.** *Amer. J. Psychiat.*, 1956, 113, 158-162.—The Medical Counseling Clinic's experience with weekly outpatient psychotherapy of a series of 100 cases of drug addiction is described.—*N. H. Pronko.*

6304. **Bowman, Karl M.** (*U. California Sch. Med., San Francisco.*) **Alcoholism; theory, problem and challenge: IV. The treatment of alcoholism.** *Quart. J. Stud. Alcohol.*, 1956, 17, 318-324.—Because the learning theorist, the sociologist, and the nutritionist have so far failed to develop a comprehensive theory of the etiology of alcoholism the practicing psychiatrist must regard alcoholism as a symptom of underlying personality disorder, partly physiological and partly psychological. Implications for treatment are made.—*W. L. Wilkins.*

6305. **Brenner, Charles.** **Psychopathology of the masochistic character: illustrative cases.** *J. nerv. ment. Dis.*, 1956, 123, 86-87.—Abstract and discussion.

6306. **Button, Alan D.** (*Valley Children's Hosp., Fresno, Calif.*) **The psychodynamics of alcoholism: a survey of 87 cases.** *Quart. J. Stud. Alcohol*, 1956, 17, 443-460.—Manner of relating; perception of self, of role and of own situation; type of ego control—over or under-control—defense mechanisms utilized; identification patterns; interpersonal relationships; reasons given for drinking; psychodiagnosis (passive-dependent being most frequent); and prognosis are reviewed.—*W. L. Wilkins.*

6307. **Button, Alan D.** (*Valley Children's Hosp., Fresno, Calif.*) **A study of alcoholics with the Minnesota Multiphasic Personality Inventory.** *Quart. J. Stud. Alcohol*, 1956, 17, 263-281.—For 101 hospitalized alcoholics the basic MMPI profile included a primary peak at Pd, a secondary peak at D, with a general elevation of "neurotic" over "psychotic" scores. Cluster analysis suggests the presence of two kinds of alcoholics, one of which is characterized by candid self-perception, with presumably better therapeutic possibilities.—*W. L. Wilkins.*

6308. **Conger, John J.** (*U. Colorado Sch. Med., Denver.*) **Reinforcement theory and the dynamics of alcoholism.** *Quart. J. Stud. Alcohol*, 1956, 17, 296-305.—Experimental literature is reviewed to show that reinforcement theory can explain the rewards of drinking behavior, even in the case of the man who is apparently punished by such behavior. Differential effects can be understood by reference to inhibition of response by fear through alcohol, or by depression of other drives which might be inhibited, or by different effects on two incompatible response tendencies, or by the overriding effects of learning.—*W. L. Wilkins.*

6309. **Davidson, G. M.** **The syndrome of oligothymia (psychopathy).** *J. nerv. ment. Dis.*, 1956, 124, 156-162.—Representative studies of psychopathy are reviewed from a descriptive, neurodynamic and psychodynamic approach. The author's own view is then developed in which poverty of affect is seen as the central fact of psychopathy. For this reason, the term, oligothymia, is proposed as a label for the condition. Psychodynamics as well as the neurodynamics involved are presented. 22 references.—*N. H. Pronko.*

6310. **Davies, D. L., Shepherd, Michael, & Myers, Edgar.** (*Maudsley Hosp., Eng.*) **The two-years' prognosis of 50 alcohol addicts after treatment in hospital.** *Quart. J. Stud. Alcohol*, 1956, 17, 485-502.—Nearly 90% of the patients who resumed drinking did so within 6 months and mostly within 3 months. Most hospital predictions were gloomier than later facts warranted. The favorable outcome seems to be related to such factors as: intermittent drinker with good previous personality, with satisfactory work record, married, seeking help for the first time, socially stable, with close personal ties to at least one person, and willing to continue Alcoholics Anonymous. 22 references.—*W. L. Wilkins.*

6311. **Ebbing, H. C.** (*U. Münster, Germany.*) **Migräne bei Zwillingen, vorläufige Mitteilung.** (Migraine in twins, a preliminary report.) *Acta genet. med. gemellolog.*, 1956, 5, 371-382.—In a study of an unselected series of 19 twins with migraine, the hereditary basis seems to lie in a vegetative, diencephalic dysfunction. With regard to typical migraine only one monozygotic pair was concordant,

but all monozygotic pairs and 20% of the dizygotic pairs demonstrated a distinct picture of vegetative dystonia. Clinical manifestations of migraine would be determined by various preformative influences of an endogenous or exogenous nature. 47-item bibliography. Italian, French, and English summaries.—*D. A. Santora.*

6312. Ellis, Albert. The effectiveness of psychotherapy with individuals who have severe homosexual problems. *J. consult. Psychol.*, 1956, 20, 191-195.—"Twenty-eight male and twelve female individuals with severe homosexual problems were seen for from 5 to 220 sessions of active psychoanalytic psychotherapy. In terms of their achieving satisfactory sex-love relations with members of the other sex, it was found that 36% of the male patients were little or not at all improved; 25% distinctly improved; and 39% considerably improved. Of the female patients, 33% were distinctly improved; 66% considerably improved." 18 references.—*A. J. Bachrach.*

6313. Flicker, David J. (82 Clinton Ave., Newark, N. J.) Malingering—a symptom. *J. nerv. ment. Dis.*, 1956, 123, 23-31.—Malingering, which cannot be considered a single entity, is discussed as it occurs in: psychosis, constitutional psychopathic states, oligophrenia, psychoneurosis, fear states and morale deficiencies. 69 references.—*N. H. Pronko.*

6314. Gerard, Donald L., Weisselberger, David, & Kritz, David. Reserpine in the postwithdrawal rehabilitation of adolescent opiate addicts. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 106-108.—14 patients, receiving the drug, and 13, receiving a placebo, were studied from 3 to 8 days, after a 30-day withdrawal from opiates. "Observations suggest that oral reserpine taken voluntarily is not a useful adjunct to the rehabilitation of the adolescent opiate addict . . . the modal response was deleterious."—*L. A. Pennington.*

6315. Goody, Jack. A comparative approach to incest and adultery. *Brit. J. Sociol.*, 1956, 7, 286-305.—An attempt to clarify the meaning of heterosexual offences such as incest and adultery by a comparative study of the social structure of the Tallensi and Ashanti of the Gold Coast of Africa.—*R. M. Frumkin.*

6316. Guze, Samuel B., Winokur, George, & Levin, Marvin E. The effect of electroshock therapy in the absence of both adrenal glands. *J. nerv. ment. Dis.*, 1956, 124, 195-198.—The case history of a patient is presented to show that an intact, functioning adrenal cortex is not necessary for successful use of electroshock treatment in depression.—*N. H. Pronko.*

6317. Haber, William B. (New York U.) Observations on phantom-limb phenomena. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 75, 624-636.—After reviewing the peripheral, central, and combined theories offered to account for the event, the author describes his interview studies with 24 unilateral-above-the-elbow adult amputees. Results showed that all had illusions of the phantom limb, that the experiences were in general similar ("tingling," etc.). Shrinkage and telescoping were reported. Fading occurred in a definite orderly sequence. These and other observations are interpreted as supporting a central

theory of the phenomenon. 43 references.—*L. A. Pennington.*

6318. Hewitt, Donald W. (Charity Alcoholic Rehab. Cent., Los Angeles, Calif.) Alcoholism; a treatment guide for general practitioners. Philadelphia, Pa.: Lea & Febiger, 1957. 112 p. \$3.00.—Stressing practical advice to the general medical practitioner seeing alcoholics in his office, this treatment guide covers the state of the problem from the point of view of the patient and his family, and reviews medical aspects of management, physical treatment, complications of drugs, follow-up therapy, and advice to the family to help the alcoholic be understood.—*W. L. Wilkins.*

6319. Himwich, Harold E. (Ed.) (Galesburg State Hosp., Ill.) Alcoholism, basic aspects and treatment. Washington, D. C.: American Association for the Advancement of Science, 1957. viii, 212 p. \$5.75.—19 papers from the symposium at the AAAS meetings of 1955 are concerned with basic aspects of alcoholism, including C.N.S. effects, metabolism, vitamin deficiency, and effects on autonomic and somatic responses; and with treatment, including treatment for alcoholic poisoning and for delirium tremens, effects of various pharmacological agents, therapeutic and management principles, and the significance of recent advances in physiology for treatment of acute and chronic alcoholism.—*W. L. Wilkins.*

6320. Hoffing, Charles K., & Minnehan, Robert W. A case of an unusual impulse disorder. *Brit. J. med. Psychol.*, 1956, 29, 150-161.—"The patient who is the subject of this report is presented partly because the unusual nature of his behaviour, the ritualistic sucking of his own blood, constitutes a psychiatric curiosity, and partly in the hope that a consideration of his personality and the function of his symptomatic behaviour may be of value as evidence regarding the working of certain archaic psychodynamics. The patient's adjustment was such that an opportunity was afforded of studying a bizarre symptom against a background of ego function which was less impaired than is often the case in such a situation. The diagnostic phrase appearing to have the greatest value in bringing this patient into focus with regard to the fundamental observations which have been made in this area is that of onanistic algolagnia."—*C. L. Winder.*

6321. Kennard, Margaret A. The electroencephalogram and disorders of behavior. *J. nerv. ment. Dis.*, 1956, 124, 103-124.—Papers are reviewed that were published during the years 1950-1955 insofar as they demonstrate the present state of knowledge concerning the relation of EEG patterns to behavioral patterns and to personality structure. Stress is on studies that eliminate the ambiguities of previous research and that further progress in understanding of functional processes related to the brain. 139 references.—*N. H. Pronko.*

6322. Kerner, Oliver J. B. (Portal House, Chicago, Ill.) Initiating psychotherapy with alcoholic patients. *Quart. J. Stud. Alcohol*, 1956, 17, 479-484.—On first contact, no probing interview, no battery of psychological tests, no thorough physical examination, even avoidance of any threat through interview—these are typical of the Portal House approach.—*W. L. Wilkins.*

6323. King, Arthur B. (*Guthrie Clinic, Sayre, Pa.*) "Phantom" sciatica. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 72-74.—2 case reports are presented of men who sustained protruding intervertebral discs with accompanying sciatica in previously amputated legs.—*L. A. Pennington.*

6324. Lemere, Frederick; O'Hollaren, Paul, & Maxwell, Milton A. Sex ratio of alcoholic patients treated over a 20-year period. *Quart. J. Stud. Alcohol*, 1956, 17, 437-442.—The proportion of women treated has increased during the period in which the average ratio was 7.6:1. The proportion of women was highest in patients who had few or no children, were younger, were widowed, who were referred by physicians, or who were Catholic.—*W. L. Wilkins.*

6325. Lemert, Edwin M. (*U. California, Davis.*) Alcoholism and the sociocultural situation. *Quart. J. Stud. Alcohol*, 1956, 17, 306-317.—Examination of the relevant data from cross-cultural studies suggests that learning theory explanations of the etiology of alcoholism are as yet inadequate to explain the data from sociological and anthropological studies. There is no real reason why inebriation should in all cultures be regarded as deprivation in personality or of defective social organization—it can be regarded as an institutionalized pattern operating fairly autonomously so far as the rest of the culture is concerned. 38 references.—*W. L. Wilkins.*

6326. Levin, Gideon. Al b'ayat ham'tsitsa. (On the problem of sucking.) *Hahinukh*, 1955/56, 28, 305-306.—Remarks on the paper of Bar-Yosef (see 31: 3320).

6327. Levin, Max. (350 Central Park West, New York 25.) Spatial disorientation in delirium. *Amer. J. Psychiat.*, 1956, 113, 174-175.—"Spatial disorientation may be the forerunner of delirium, showing up when the patient is otherwise still correctly oriented for place as revealed by the standard questions of the mental examination."—*N. H. Pronko.*

6328. Macdonald, Donald E. (*State Hosp., Butner, N.C.*) Mental disorders in wives of alcoholics. *Quart. J. Stud. Alcohol*, 1956, 17, 282-287.—For 11 of 18 female patients admitted to the state hospital, wives of alcoholics, the decrease in husband's drinking was a precipitating cause.—*W. L. Wilkins.*

6329. Murphy, Mary Martha. (*State Colony, Woodbine, N.J.*) Social class differences in frustration patterns of alcoholics. *Quart. J. Stud. Alcohol*, 1956, 17, 255-262.—Compared with Rosenzweig's norms, alcoholics from lower class cultures respond unconventionally on the P-F Study. As the P-F appears to measure overt social adjustment rather than deep-level reactions and the original norms are on middle class, it may be that alcoholics are responding as lower class rather than as alcoholic subjects.—*W. L. Wilkins.*

6330. Newman, Henry W., & Newman, Edith J. (*Stanford U., San Francisco, Calif.*) Failure of dextroamphetamine and caffeine as practical antagonists of the depressant effect of ethyl alcohol in man. *Quart. J. Stud. Alcohol*, 1956, 17, 406-410.—Ordinary therapeutic doses were ineffective in combating the depressant effect of alcohol in 6 normal subjects.—*W. L. Wilkins.*

6331. Nissen, G. Psychogener Tic und Altersdisposition bei Kindern. (Psychogenic tic and the

age factor in children.) *Z. Kinderpsychiat.*, 1956, 23, 97-107.—Among 12 children with tics, typical infantility was observed in only 3. In 6, however, there were contact disturbances. Ages 4 to 7 and 13 to 16 years seem to be favored periods for the onset of symptoms. In 11 children there were previous neurotic symptoms and in 4 a compulsive neurosis had certainly existed. Almost all lived in a greatly disturbed environment, 7 having lost one or both parents. Causal therapy treats the basic neurosis; symptomatic cure can be achieved by short-term therapy. 27 references. English, French, and Spanish summaries.—*G. Rubin-Rabson.*

6332. Nitsche, Carl J., Robinson, J. Franklin, & Parsons, Edward T. Homosexuality and the Rorschach. *J. consult. Psychol.*, 1956, 20, 196.—Brief report.

6333. Pope, Benjamin. (*U. Maryland, Baltimore.*) Attitudes toward group therapy in a psychiatric clinic for alcoholics. *Quart. J. Stud. Alcohol*, 1956, 17, 233-254.—Four foci of interest and four types of benefits of therapy were used as rationale to construct statements for Q-sort. Factor analysis revealed strong positive attitudes toward the doctor as important and attitudes toward the group as a whole and individuals within the group as sources of support.—*W. L. Wilkins.*

6334. Popham, Robert E. (*Ontario Alcoholism Research Found., Toronto, Can.*) Alcoholism and traffic accidents. *Quart. J. Stud. Alcohol*, 1956, 17, 225-232.—Of 427 males charged with drunken driving in Toronto in 1954, 2.6% had been clinic patients. These drivers do not represent a random sample of casual drinkers. Traffic accidents involving drivers who have been drinking are to a great extent a problem of alcoholism rather than of the effects of alcohol on the casual drinker.—*W. L. Wilkins.*

6335. Randolph, Theron G. (700 N. Michigan Ave., Chicago, Ill.) The descriptive features of food addiction: addictive eating and drinking. *Quart. J. Stud. Alcohol*, 1956, 17, 198-224.—Specific adaptation to a regularly consumed food to which one is highly sensitive, such as corn, wheat, coffee, milk, eggs, and other frequently eaten foods. Such specific addiction is regarded as a major factor in the etiology of addictive eating and drinking. 55 references.—*W. L. Wilkins.*

6336. Ritter, Nathaniel S. (*Home Term Court, New York, N.Y.*) Experience with reserpine in the treatment of alcoholism. *Quart. J. Stud. Alcohol*, 1956, 17, 195-197.—No substantial difference between reserpine and a placebo in diminishing drinking.—*W. L. Wilkins.*

6337. Rudolf, G. de M. (*Mount Pleasant Nursing Home, Clevedon, Eng.*) The treatment of depression with methylamphetamine. *J. ment. Sci.*, 1956, 102, 358-363.—Comparison with electroshock therapy gives conflicting results depending on which is used first if both are used and also on the frame of reference of the physicians involved. Prudence suggests the drug first; then if results are not satisfactory, the use of ECT. 37 references.—*W. L. Wilkins.*

6338. Salfeld, D. J. Enuresis; addenda after two-and-a-half years. *Z. Kinderpsychiat.*, 1956, 23, 107-111.—The author discusses successively neurosurgical intervention, the specificity of enuresis in

sensitive children, the dangers of drugs chosen at random and the use of a device for administering electric current on the emission of the first drops of urine, causing the child to awake. This is not a conditioned reflex in the Pavlovian sense, but a punishment for the child. The author proposes several useful drugs in somatic therapy. French, German, and Spanish summaries.—*G. Rubin-Rabson.*

6339. **Scott, Edward M.** (*Eastern Oregon State Hosp., Pendleton.*) **A special type of group therapy and its application to alcoholics.** *Quart. J. Stud. Alcohol*, 1956, 17, 288-290.—Each member of the group takes a turn at being "it" and by facing questions from the group, learns to face reality with a sober mind.—*W. L. Wilkins.*

6340. **Simmel, Marianne L.** (*U. Illinois, Chicago.*) **On phantom limbs.** *A. M. A. Arch. Neurol. Psychiat.*, 1956, 75, 637-647.—The incidence, conditions of arousal, duration, types of change, attempts at treatment of the infrequent painful type, and relationship to cortical projection areas are discussed. The absence of the phenomenon in the leper who loses digits by absorption is reported. A plea is made for research investigations in this area. 19 references.—*L. A. Pennington.*

6341. **Smythies, J. R.** (*U. British Columbia, Vancouver, B. C., Can.*) **A logical and cultural analysis of hallucinatory sense-experience.** *J. ment. Sci.*, 1956, 102, 336-342.—In some primitive cultures people who have hallucinations are respected because the experiences are regarded as real. The cultural basis of such regard is considered and a phenomenological classification of hallucinations presented.—*W. L. Wilkins.*

6342. **Stolzenberg, Jacob.** **Psychodynamics of repression in relation to fear, apprehension, and anxiety in dental practice.** *J. Amer. Soc. psychosom. Dent.*, 1956, 3(2), 7-10.—A discussion of the "conscious and subconscious" is offered with emphasis on the high psychological potential of the oral cavity.—*J. H. Manhold, Jr.*

6343. **Weakland, John H.** **Orality in Chinese conceptions of male genital sexuality.** *Psychiatry*, 1956, 19, 237-247.—The concept of orality in the psychoanalytic literature is traced. This paper aims to develop a systematic and complete view of the oral level of development in relation to genitality. Based on anthropological data, oral images of sexuality in the Chinese culture are presented. The author proposes that oral gratification claimed during infancy is fictitious and recommends further study of the mother-child relationship in Chinese culture.—*C. T. Bever.*

6344. **Wikler, Abraham** (*U. S. Pub. Health Serv. Hosp., Lexington, Ky.*), **Pescor, Frank T., Fraser, Havelock F., & Isbell, Harris.** **Electroencephalographic changes associated with chronic alcoholic intoxication and the alcohol abstinence syndrome.** *Amer. J. Psychiat.*, 1956, 113, 106-114.—Three subjects were studied in an attempt to correlate the serial changes in the EEG during chronic alcoholic intoxication, and in the immediate period following abrupt withdrawal of alcohol with variations in blood alcohol levels, clinical estimates of degree of intoxication and the development of such alcohol abstinence phenomena as "rum fits" and delirium tremens. These results are reported as well as those derived from a

comparison of clinical and EEG changes that occur during cycles of alcohol and barbiturate addiction.—*N. H. Pronko.*

6345. **Wilkins, Walter L.** (*St. Louis U., Mo.*) **The idea of proneness in relation to alcoholism.** *Quart. J. Stud. Alcohol*, 1956, 17, 291-295.—Statistical difficulties with the concept of proneness are considered and alcoholism is regarded as a deprivational or stress disease, with the deprivational factors being environmental as well as constitutional.—*M. K. Rigby.*

(See also abstracts 5491, 6533)

SPEECH DISORDERS

6346. **Blumel, C. S.** **The riddle of stuttering.** Danville, Ill.: The Interstate Publishing Co., 1957. 142 p. \$3.50. (\$1.50 paper bound.)—The typical stutterer is self-conscious, tense, excitable, and easily confused. He has "fluster and scatter" in his verbal thinking. When he attempts to force speech, this leads to struggle and contortion and speech phobia. Therapy consists of establishing a pattern of fluent verbal thinking, rather than working directly upon the speech. Techniques are discussed and 4 speech therapy recordings are available at \$3.00. Chapter headings include: The Effort Phase of Stammering; Conditioning Factors in Secondary Stammering; The Personality of the Stammerer; and Principles of Therapy.—*L. N. Solomon.*

6347. **Eames, Thomas H.** (*Boston U., Mass.*) **Association pathways in language disabilities.** *J. educ. Psychol.*, 1956, 47, 8-10.—A brief exposition of the needed areas for research in the physiology of reading disabilities, with emphasis on the relationship among the tracts that make possible associations between the language centers in the brain.—*F. Costin.*

6348. **Ferrie, Muriel W.** **Speech defects and their treatment.** *Spec. Sch. J.*, 1956, 45(2), 15-20.—A discussion of the causes of speech defects, the speech-defective child's special problems, how speech is acquired, and special techniques of speech correction used with mentally retarded children.—(Courtesy of *Rehab. Lit.*)

6349. **Lessing, Wayland W.** **Silent spokesman; an aid to the speechless.** Chicago, Ill.: Hospital Topics, 1956. 35 p. \$1.50.—This book contains pictures of items most often needed in daily living, such as personal items, food and clothing, together with general requests, questions, and statements printed in large type to aid the speech-handicapped person to communicate his desires by pointing to what he wants. Included are words of measure, degree, and pain, as well as numbers, time chart and a pointing alphabet.—*L. N. Solomon.*

6350. **McCroskey, Robert Lee, Jr.** **The effect of speech on metabolism: a comparison between stutterers and non-stutterers.** *Dissertation Abstr.*, 1956, 16, 1532.—Abstract.

6351. **McGinnis, Mildred A., Kleffner, Frank R., & Goldstein, Robert.** **Teaching aphasic children.** *Volta Rev.*, 58, 239-244.—Because very little appears in the literature on aphasia regarding specific procedures for educating aphasic children or results of the procedures, the authors discuss here what they find to be characteristic of aphasia in children, principles of the teaching method they use, and results of

the method. Discussion is based on 35 years of experience at the Central Institute for the Deaf, St. Louis, in preparing these children for attendance at regular schools.—(Courtesy of Rehab. Lit.)

6352. Plummer, Robert N. **Dangers of delaying speech therapy.** *Ariz. Med.*, 1956, 13, 8-9.—Between birth and age 6 it is much easier for the speech defective child to acquire normal speech since this is the period of natural speech development. Delay in instituting therapy until the child has reached school age results in psychological trauma to the child. Some parents believe that the child will "outgrow" his speech defect without the aid of speech therapy, but statistical records do not confirm this belief. The author feels that the solution to the problem lies in educating parents, the schools, and every agency which contacts the speech defective, alerting them to the need for early treatment.—(Courtesy of Rehab. Lit.)

6353. Riese, Walther. (Med. Coll. Virginia, Richmond.) **Semantic aphasia; a clinical neuropathological study including a report of the first known case of semantic aphasia with complete examination of the brain.** *J. nerv. ment. Dis.*, 1956, 123, 18-22.—"In the analysis here submitted, for the first time an effort has been made to correlate various types of aphasia and the preserved speech components implied with the amount of tissue preserved."—N. H. Pronko.

6354. Skalbeck, Oliver M. **The relationship of expectancy of stuttering to certain other designated variables associated with stuttering.** *Dissertation Abstr.*, 1956, 16, 1738.—Abstract.

6355. Solnitzky, Othmar. **Disturbances of language formulation and expression.** *Gen. Practit.*, 1956, 14, 83-94.—Discusses the various parts of the cerebral cortex which directly or indirectly are concerned with the function of speech, the normal processes underlying the cortical mechanism of speech, and how lesions in the various cortical areas affect aspects of speech—understanding, expression, formulation, or calculation.—(Courtesy of Rehab. Lit.)

6356. Stromsta, Courtney Paul. **A methodology related to the determination of the phase angle of bone-conducted speech sound energy of stutterers and non-stutterers.** *Dissertation Abstr.*, 1956, 16, 1738-1739.—Abstract.

6357. Travis, Lee Edward. (Ed.) (*U. S. California, Los Angeles.*) **Handbook of speech pathology.** New York: Appleton-Century-Crofts, 1957. viii, 1088 p. \$12.00.—This coverage of the field of communication disorders consists of 33 chapters on the various sub-fields written separately by 27 authorities. The editor makes the point that a disorder of speech is a "disorder of the person as well as a disorder in the reception and transmission of spoken language." Examination procedures and therapeutic suggestions reflect this view. The 4 parts include: (1) Eight chapters of detailed basic material including the development, neurophysiology, sound formation, and acoustics of speech; incidence and evaluation and diagnosis of disorders; and separate chapters on terminology and nomenclature and instrumentation; (2) Pathology and diagnostic and educational or training procedures for speech and voice disorders associated with organic abnormalities; (3) Symptomatology and therapeutic procedures for speech and

voice disorders unrelated to organic abnormalities; (4) Psychotherapy and speech therapy.—R. Schaefer.

6358. West, Robert; Ansberry, Merle, & Carr, Anna. **The rehabilitation of speech.** (3rd ed.) New York: Harper & Brothers, 1957. 688 p. \$7.50.—This enlarged edition (see 22: 4047) reflects the greatly increased and ever increasing ideas and knowledge of facts and principles in the field, and a modified point of view to enhance its heuristic value. The 1947 edition contains material not in this one which would ordinarily have appeared without change; it may therefore be considered as a supplement to this one. The first part, by West, covers pathology of speech and rationale for rehabilitation devoting space to each disorder or defect in turn. There are also chapters on mongolism, and case study and evaluation. The second part, on remedial principles, by Ansberry and Carr, covers disorders and defects under other headings with a chapter devoted to procedures with children. 55-page glossary.—R. Schaefer.

6359. Wingate, Marcel Edward. **An experimental investigation of the effect produced by calling attention to stuttering.** *Dissertation Abstr.*, 1956, 16, 1722.—Abstract.

6360. Zylkiewicz, J. **Haftaot b'dibur b'Israel uvaolam.** (Speech disorders in Israel and abroad.) *Harofe Haivri*, 1955, 28, 70-75.—Stuttering (both functional and organic) is the most frequent speech disorder in Israel. As a consequence of the immense immigration, the percentage of stuttering persons (children and adults) is greater in Israel than abroad. But, in general, stuttering children are treated in Israel to a greater extent than abroad. Treatment and educational suggestions are given.—H. Ormian.

(See also abstract 6178)

CRIME & DELINQUENCY

6361. Adamson, LaMay, & Dunham, H. Warren. **Clinical treatment of male delinquents: a case study in effort and result.** *Amer. sociol. Rev.*, 1956, 21, 312-320.—(See *Sociol. Abstr.*, 1957, 5, abs. 3310.)

6362. Arnon, Yosef. **Hanoar haavaryan b'Anglia.** (Delinquent youth in England.) *Ofakim*, 1956, 10, 23-30.—The situation is explained on the basis of reports published recently in newspapers in London. Causes of juvenile delinquency in England are: broken families, inappropriate sexual education, inner difficulties, progressive education in an authoritarian environment. Recognized ways to treat juvenile delinquency in England are described, especially the Borstal system: character education, work, vocational training, and study.—H. Ormian.

6363. Baker, Bela O., & Sarbin, Theodore R. **Differential mediation of social perception as a correlate of social adjustment.** *Sociometry*, 1956, 19, 69-83.—41 psychopathic delinquents and 48 non-delinquents were presented with limited cinematographic cues and asked to predict the behavior of two dissimilar social objects to a non-verbal preference test. No difference was found in raw accuracy scores. "Differential mediation of similar achievement scores, however, is demonstrated, . . ." Delinquents tend to use more non-differentiating responses, i.e., to make the same prediction for both social objects and self.

This finding supports the theory that lack of perceptual cognitive differentiation is a determinant of the social retardation reflected in chronic delinquency. 21 references.—H. P. Shelley.

6364. Cohen, Frank J. (Ed.) *Youth and crime; proceedings of the Law Enforcement Institute held at New York University*. New York: International Universities Press, 1957. xiii, 273 p. \$6.00.—The Institute (July 18-21, 1955) was sponsored by the Attorney General of The State of New York, and by the Chairman of the N. Y. State Youth Commission in cooperation with the Graduate School of New York University. The contents of the 8 sessions are recorded in this volume. The 25 reports focus upon the problem of prevention. "It is obvious that effective treatment of the juvenile delinquent involves action on many fronts and that lasting methods for prevention and control must be developed."—L. A. Pennington.

6365. Cole, Cletus A. *The self concept as a means of determining personality types in a population of delinquent boys*. Washington, D. C.: Catholic University of America Press, 1957. 48 p. 75¢.—Factor analytic study of the data provided by use of the Q-sort administered to 20 delinquent white males at The National Training School for Boys in Washington, D. C., "has led to the isolation of 2 groups . . . [and] an indication of generality of the characteristics of the groups isolated." It is concluded that "a population of delinquent boys is not homogeneous but consists of clinically differentiable groups." These and other issues are discussed in relation to the problem of "types" in the delinquent population.—L. A. Pennington.

6366. Donohue, John K. ". . . Baffling eyes of youth." New York: Association Press, 1957. x, 251 p. \$3.50.—This book's 21 chapters represent a social worker's diary record of his experiences in the area of gang study during the 1930s. "It is a true story of boys" and contains "incidents similar to those of today."—L. A. Pennington.

6367. Frym, Marcel. (U. Southern California, Los Angeles.) *The treatment of recidivists*. *J. crim. Law Criminol.*, 1956, 47, 1-7.—A plan is described and developed whereby recidivists are rehabilitated within society by a joint work-treatment program. A plea is made for the behavior sciences to cooperate in its operation.—L. A. Pennington.

6368. Glueck, Eleanor T. (Harvard U., Cambridge, Mass.) *Status of Glueck prediction studies*. *J. crim. Law Criminol.*, 1956, 47, 18-32.—The rationale, development, refinements, and validation of the Gluecks' method are set forth in chronological order. 4-page reference list.—L. A. Pennington.

6369. Glueck, Sheldon, & Glueck, Eleanor T. *Early detection of future delinquents*. *J. crim. Law Criminol.*, 1956, 47, 174-182.—The authors' 3 scales (social factors, character structure by way of psychiatric interview, temperament by way of Rorschach indicators) are administered singly and in all combinations to matched delinquent-nondelinquent groups. Statistical analyses indicate that the Social Scale alone is sufficient for detection purposes. The administration of the Rorschach and the psychiatric interview do not, therefore, increase the discriminatory value of the Social Scale.—L. A. Pennington.

6370. Harriman, Byron Lynn. *Influence of group-centered therapy and mental health films on attitudes of prisoners*. *Dissertation Abstr.*, 1956, 16, 1494-1495.—Abstract.

6371. Hartung, Frank E. (Wayne U., Detroit, Mich.), & Floch, Maurice. *A socio-psychological analysis of prison riots: an hypothesis*. *J. crim. Law Criminol.*, 1956, 47, 51-57.—Two types of riots are characterized, the brutal (a function of bad physical conditions) and the collective. When the prison is viewed as a social institution, then the collective riot is a function of the "nature of the maximum custody prison, the commingling of divergent types of personalities, and the destruction of the semi-official inmate self-government with nothing to replace it." Officials can reduce the likelihood of the collective riot by constructive utilization of the skills of the inmate leaders so that incentives are again operative in making a "peaceful prison."—L. A. Pennington.

6372. Horowitz, Milton W. (Queens Coll., Flushing, N. Y.) *The psychology of confession*. *J. crim. Law Criminol.*, 1956, 47, 197-204.—Analysis is made of those accused who confess voluntarily to the acts. Study of the cognitive, perceptual, and motivational aspects of such situations indicates 3 main psychological conditions are operative: Accusation by authority, presentation of evidence, reduction in forces "friendly to the accused." Guilt is felt with confession viewed as the "path to psychological freedom." Dynamics of the confession are developed by reference to Lewin and field theory.—L. A. Pennington.

6373. Larson, John C. (New York U.) *On rehabilitating chronic traffic offenders*. *J. crim. Law Criminol.*, 1956, 47, 46-50.—It is suggested that group psychotherapy techniques be used to change the attitudes apparent in the chronic traffic offender. 22 references.—L. A. Pennington.

6374. Lebo, Dell. (Carter Mem. Hosp., Indianapolis, Ind.) *The identification of delinquent's needs*. *J. correctional Educ.*, 1956, 8, 42-44.—Literature on delinquency largely emphasizes single causative factors. Such emphasis leads to contradictory results. Indeed, a spate of articles indicates that delinquents are really normal children. A most comprehensive study is that of the Gluecks'. Their method, however, is too costly and lengthy for most institutions. Subtests of the California Test of Personality are compared with the Gluecks' Rorschach findings and similarities are indicated. Suggestions for treating delinquents are offered. 13 references.—D. Lebo.

6375. Lifton, Robert J. *"Thought reform" of western civilians in Chinese Communist prisons*. *Psychiatry*, 1956, 19, 173-195.—During 17 months in Hong Kong psychiatric interviews were conducted with 25 Westerners who had recently been imprisoned by the Chinese Communists and subjected to *Szu Hsiang Kai Tsao*, known in the West as brainwashing, and conducted as a penal program by the government. The concept of "reform" in the Chinese penal system is described. The experience of the average prisoner is outlined: the arrest, the emotional assault of the interrogations, and the pressure from cellmates to confess. At the breaking point the prisoner is treated with calculated kindness designed to lead to a confession of crimes as seen from "the people's stand-

point." The program of subsequent re-education, trial and release is described. The source and impact of this program are explored with comments upon the moral implications of this manipulative program and upon the special sensitivity of the Chinese to the feeling-tones of human interaction.—C. T. Bever.

6376. Lodge, T. S. A comparison of criminal statistics of England and Wales with those of Scotland. *Brit. J. Delinquency*, 1956, 7, 50-60.—No great difference in incidence is reported. Lengths of sentences, however, are found much longer in England and Wales than in Scotland.—L. A. Pennington.

6377. McCann, Richard V. Delinquency: sickness or sin? New York: Harper & Bros., 1957. xii, 179 p. \$3.00.—The volume's 15 chapters and 2 appendices describe the approaches, methods and results "to the study of the role of religion in delinquency prevention" conducted at Harvard Divinity School and Andover Newton Theological School. Psychological factors, including distortions in the self concept, are discussed and illustrated by case report. It is concluded that "the antisocial acts and attitude of the delinquent can be regarded as symptoms of an illness of the mind, personality, and spirit." A plea is made for active participation by the clergy in the quest for solutions.—L. A. Pennington.

6378. MacLay, David T. (St. George's Hosp., Hornchurch, Essex, Eng.) Indications for residential treatment of the delinquent child. *Brit. J. Delinquency*, 1956, 7, 27-43.—The case histories of 99 delinquent children are reviewed in the quest for determinants regarding removal from the home into residential institutions. Plea is made for careful evaluation.—L. A. Pennington.

6379. Maconochie, Kenneth J. Changing the pattern of behavior; outline of a therapy for criminal reform. *J. crim. Law Criminol.*, 1956, 47, 162-173.—The thesis is developed that the Mark System devised in 1840 by Captain Maconochie (Norfolk Island) and the Alexander Technique developed by the Australian, F. Matthias Alexander, in combination provide a method for rehabilitation of most criminals. The Mark System requires the prisoner to earn his "freedoms" by inhibiting "bad" behavior; the Alexander approach is based upon reconditioning procedures involving postural defects in the head and neck muscles (after Magnus). By learning to control these postural defects "marks" can be earned. 22 references.—L. A. Pennington.

6380. Morris, Norval; Talf, Ronald, & Angus, G. A. W. Criminal responsibility and insanity; the significance of *Durham v. United States* for Australian courts. *Univ. West. Australia Ann. Law Rev.*, 1955, 3, 309-333.—A lawyer, a psychologist, and a psychiatrist critically evaluate the 1954 Court of Appeals' decision for the District of Columbia regarding *Durham's* lack of criminal responsibility by virtue of adjudged mental disease. The consensus is that the broad legal and behavioral problems involved can eventually be resolved by assuming a middle position between the M'Naughten formula (1842) and the *Durham* decision.—L. A. Pennington.

6381. Mukherjee, Bishwa Nath. (Patna U., India.) Psychological approach to juvenile delinquency. *Indian J. soc. Wk*, 1956, 17, 12-20.—Juvenile delinquency defined legally as misdeeds of

persons, ranging in age from 7 to 21, which are harmful to society is differentiated from a psychological definition: "alloplastic infringement of social values." The latter leads to a consideration of the individual's attitude toward society. Various psychological causes of delinquent behavior are mentioned and suggestions for prevention are included. 32 references.—R. Schaefer.

6382. New York. (City.) Children need families; a second look at delinquency prevention. New York, Author, 1955. 60 p.—The rationale, approaches, and achievements are summarized with reference to child welfare problems. 148 references.—L. A. Pennington.

6383. Perl, William R. (U. S. Army Hosp., Munich, Germany.) Therapeutic use of certain defects of the usual prison. *J. crim. Law Criminol.*, 1956, 47, 58-63.—Close confinement offers "a unique . . . opportunity for the treatment of the psychopath. It permits planned reduction to a minimum of his habitual way of dissipating tension, and thus offers systematic control and employment of his anxiety for treatment purposes. Also, the authoritarian setting satisfies strong dependent needs of the psychopath." These and other observations regarding the treatment of the psychopath are incorporated in the description of the treatment program at Fort Leavenworth, Kansas. 19 references.—L. A. Pennington.

6384. Rauf, Abdur. (C. T. Coll., Lahore, Pakistan.) Physical factors in the causation of juvenile delinquency. *Medicus, Karachi*, 1956, 12(2), 56-59.—The physical disabilities found in Pakistan differ considerably from those found in temperate regions where juvenile delinquency has been studied. In this paper, the physical factors have been explained, and the importance of their investigation among the delinquent and non-delinquent children of Pakistan is emphasized.—A. H. Alawi.

6385. Reifen, David. Al shitot hatipul hamishpati b'avaryanim ts'irim. (Legal methods to treat juvenile offenders.) *Dapim*, 1955/56, 4(3-4), 17-22.—Juvenile Court has remained aloof from recent advance in understanding of behavior difficulties and problems in interpersonal relations, and has failed to profit by them. The authoritative character of the Juvenile Court makes it less elastic than other social agencies in introducing new techniques. Types of dealing with juvenile offenders in some states are described. In Israel the Juvenile Court Judge has training as a caseworker coupled with legal training. Adjudication of juvenile offenders requires professional training in the dynamics of human behavior.—H. Ormian.

6386. Reifen, David. Averot min neged y'ladim. (Sexual offences against children—a new method of investigation in Israel.) *M'gamot*, 1956, 7, 399-405.—Analysis of psychological and educational advantages of the law recently passed in Israel is given, which prescribes methods of investigation and court appearance of children, victims of sexual offences. The law aims at protecting these children from additional shock, which is a consequence of police and court investigation. Now, the investigation has to be conducted in a proper psychological way by specialists in child care and mental hygiene. Afterwards the specialist will appear in court instead of the injured child. English summary.—H. Ormian.

6387. Ross, A. D. A clinical communication; epileptiform attacks provoked by music. *Brit. J. Delinquency*, 1956, 7, 60-63.—This is a case report from British Somaliland in which a 14-year-old native boy killed another during a so-called attack of "musigenic epilepsy." The medical versus the anthropological views are debated by virtue of the culture in which animism and exorcism predominate. Comment is made by Grace G. Harris, pp. 62-63.—L. A. Pennington.

6388. Schmideberg, Melitta. Delinquent acts as perversions and fetiches. *Brit. J. Delinquency*, 1956, 7, 44-49.—The view is expressed that "most acts of pathological delinquency can be classed wholly or partly as perversions or fetiches." Illustrations are then given from the treatment sessions of selected antisocial personalities.—L. A. Pennington.

6389. Scott, Peter. (Maudsley Hosp., London, Eng.) Gangs and delinquent groups in London. *Brit. J. Delinquency*, 1956, 7, 4-26.—A characterization of these groups, the need for continued study, and implications for therapeutic approaches are set forth. 41 references.—L. A. Pennington.

6390. Shanmugam, T. E. (U. Madras, India.) Sex delinquency and emotional instability in women. *Indian J. soc. Wk*, 1956, 17, 30-43.—40 sex delinquent women were matched with 36 normals for age, socio-economic background, educational level, and general intelligence. Onset of puberty was significantly earlier in the delinquent group. A 100-item personality inventory devised by the writer to elicit a "yes" or "no" response in reference to various symptoms (somesethenic tendencies, neuresthenic tendencies, hypersensibility, paranoid tendencies, anxiety, depression, excitability, orientation towards reality, socially inactive and sleep disorders) and yielding an emotional stability score was administered individually and orally. The empirically grouped syndromes of paranoid, neuresthenic tendencies, and sleep disorders were very important in the sex delinquent group.—R. Schaefer.

6391. Smigel, Erwin O. Public attitudes toward stealing as related to the size of the victim organization. *Amer. sociol. Rev.*, 1956, 21, 320-327.—(See *Sociol. Abstr.*, 1957, 5, abs. 3315.)

6392. Wattenberg, William W., & Moir, John B. (Wayne U., Detroit, Mich.) A study of teen-agers arrested for drunkenness. *Quart. J. Stud. Alcohol*, 1956, 17, 426-436.—Comparison of 141 boys in Detroit with records for arrest for being drunk with 9555 other boys seen by police on complaints suggests that these two groups are quite similar. For girls the comparison yielded similar results.—W. L. Wilkins.

6393. Webb, Robert, & Webb, Muriel. The churches and juvenile delinquency. New York: Association Press, 1957. 64 p. \$50.—This pamphlet in 6 sections has been written at the request of the National Council of Churches of Christ. Its objective is to serve as a guide for leaders "in the Christian community, both clerical and lay," on the topic.—L. A. Pennington.

6394. Weber, George H. Clinical approach to selecting and training personnel for institutions serving delinquents. *J. crim. Law Criminol.*, 1956, 47, 33-45.—Review of the problems met in selecting and training workers at all levels for participation in

the "rehabilitation approach" is given along with practical suggestions.—L. A. Pennington.

6395. Wolfgang, Marvin E., & Strohm, Rolf B. (U. Pennsylvania, Philadelphia.) The relationship between alcohol and criminal homicide. *Quart. J. Stud. Alcohol*, 1956, 17, 411-425.—Analysis of files of the Philadelphia Homicide Squad for 1948 through 1952 (588 cases) showed alcohol present as a factor in 67% of cases where a Negro was offender, but in only 58% where a white was offender; and present in 70% when a Negro was victim but in only 49% when a white was slain. Alcohol is more likely to be a factor also when males rather than females are involved. 23 references.—W. L. Wilkins.

(See also abstract 6211)

PSYCHOSES

6396. Abély, Paul. Est-ce que les psychoses gravidiques sont des psychoses puerpérales? (Are pregnancy psychoses the same as post-partum psychoses?) *Ann. Méd. Psychol.*, 1956, 1, 239-246.—Although these 2 types of disorders are often grouped in the category of puerperal psychosis, there are basic differences between post-partum psychosis and those occurring during pregnancy. The etiology, clinical symptomatology, modes of therapy are dissimilar. Pregnancy psychoses are described as complex disorders involving endocrine unbalance, psychological adaptation and often a toxic condition, while post-partum psychoses, apparently more specifically caused by diencephalo-pituitary disturbances, are generally characterized by metabolic upsets and confusional states.—M. D. Stein.

6397. Azima, H., & Wittkower, E. D. Gratification of basic needs in treatment of schizophrenics. *Psychiatry*, 1956, 19, 121-129.—The hypothesis that gratification of basic needs may result in better contact with reality in the treatment of some schizophrenics was investigated with 6 female patients, less regressed than the patients previously reported upon. The reaction to therapy is described in each case with a note on the group interaction. The goals and results of this approach and suggestions for further research are given.—C. T. Bever.

6398. Barsa, Joseph A., & Kline, Nathan S. A comparative study of reserpine, chlorpromazine, and combined therapy. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 90-97.—3 groups of 150 psychotic female patients, treated by either drug or in combination for 3 to 7 months, have been clinically evaluated with reference to efficacy of the drug therapies. Marked improvement percentages for the drugs, as listed in the above title, were 21, 26, and 23. Combined therapy was found more effective in chronic, deteriorated schizophrenia, while chlorpromazine was more effective in cases of acute schizophrenia and in the depressions. Side-reactions of the drugs are also discussed.—L. A. Pennington.

6399. Beckett, Peter G. S., Robinson, David B., Frazier, Shervert H., Steinhilber, Richard M., Duncan, Glen M., Estes, Hubert R., Litin, Edward M., Grattan, Robert T., Lorton, William L., Williams, George E., & Johnson, Adelaide M. The significance of exogenous traumata in the genesis of schizophrenia. *Psychiatry*, 1956, 19, 137-142.—

Schizophrenic patients and their parents were intensively studied at the Mayo Clinic in an effort to elucidate the various endogenous and exogenous forces influencing the genesis of schizophrenia. The method of study is described. Note is made of the significance of traumatic assault in these cases with clinical references and examples of hostile introjection.—C. T. Bever.

6400. Bercel, Nicholas A., Travis, Lee E., Olinger, Leonard B., & Dreikurs, Eric. (U. Southern California, Los Angeles.) **Model psychoses induced by LSD-25 in normals. I. Psychophysiological investigations with special reference to the mechanism of the paranoid reaction.** *A.M.A. Arch. Neurol. Psychiat.*, 1956, 75, 588-611.—Administration of the drug to 25 normal adults from widely varied occupations, permitted psychological, neurological, and electroencephalographic studies over, in general, a 4 hour period. Selected results indicated a temporary change in "psychic functioning resembling most the undeteriorated schizophrenic reaction." Paranoid-like reactions in 14 Ss followed predictably cross-sense mode influences. These and other results are discussed in relation to hypotheses related to elucidating the problem of the mechanisms involved. It is suggested that enzyme inhibition on the biochemical side and the vulnerability of the temporal lobe-diencephalic circuits on the neurophysiological side may be responsible. A review of the literature on the induction of "model psychoses" is given. 46 references.—L. A. Pennington.

6401. Bercel, Nicholas A., Travis, Lee E., Olinger, Leonard B., & Dreikurs, Eric. (U. Southern California, Los Angeles.) **Model psychoses induced by LSD-25 in normals. II. Rorschach test findings.** *A.M.A. Arch. Neurol. Psychiat.*, 1956, 75, 612-618.—The Rorschach was administered, first, at the "height" of the LSD-25 reaction and, second, several weeks later to 25 normal Ss. 13 records for the experimental and nondrug states were suitable for study. Results "tended to show that there are, potentially, indices of prediction for psychotic-like reactions under LSD, although the presently obtained ones . . . appear to require considerable refinement. The 2 'best' kinds seem to be: (a) excessive productivity and (b) pronounced sexual disturbance in the control Rorschach record." In the paranoid-like reaction alone, the presence of complex "synesthesiae" appeared more predictive than results from the Rorschach test.—L. A. Pennington.

6402. Betz, Barbara J., & Whitehorn, John C. (Johns Hopkins Hosp., Baltimore, Md.) **The relationship of the therapist to the outcome of therapy in schizophrenia.** *Psychiat. Res. Rep.*, 1956, No. 5, 89-105.—This is a study of 14 physicians and their treatment approaches to 100 patients. In Group A 75% improved while in Group B (52 cases) 27% improved. The difference was found, in part, to lie in the attitude and the active personal participation approach used by the physicians working with Group A patients. These and other findings are discussed in relation to treatment problems with this diagnostic group. Pp. 106-117 are given over to the discussion of this paper. 83 references.—L. A. Pennington.

6403. Bisi, Ricardo H. **Dermatosis in a case of postpartum psychosis.** *Psychoanal. Quart.*, 1956,

25, 348-356.—"Some clinical data are presented from the analysis of a woman who developed a severe facial acne when she suffered a deep postpartum psychotic regression. The patient's irresistible compulsion to squeeze the pustules of the acne was an act of partial self-destructive punishment in which the aggression she felt against her child and her mother was turned against herself." 28 references.—L. N. Solomon.

6404. Board, Francis; Persky, Harold, & Hamburg, David A. (Michael Reese Hosp., Chicago, Ill.) **Psychological stress and endocrine functions; blood levels of adrenocortical and thyroid hormones in acutely disturbed patients.** *Psychosom. Med.*, 1956, 18, 324-333.—Do acutely disturbed patients have elevated blood levels of adrenocortical and thyroid hormones? This question when tested by means of biochemical blood analyses received an affirmative answer. Intense stress, evaluated by interview methods, and evidence for extensive personality disintegration (as in the psychotic depressive reactions) were accompanied by high endocrine levels. These and other results are discussed in relation to recent literature on the topic. 31 references.—L. A. Pennington.

6405. Boudwin, James (V.A. Hosp., American Lake, Wash.), & Kline, Nathan S. **Use of reserpine in chronic non-disturbed psychotics.** *Psychiat. Res. Rep.*, 1956, No. 4, 71-78.—88 chronic non-disturbed patients after 15 weeks under reserpine treatment showed 91% improved "of whom 17% were ready for release." In another study of disturbed patients 21% were released. The addition of desoxyephedrine to the medication regimens merely reduced the side effects from the reserpine. It is concluded that reserpine is effective with the chronically disturbed and non-disturbed psychotic populations and that the "active principle" is not a sedative one. Therapeutic lag was also noted in this study—continued improvement after cessation of medication. 19 references.—L. A. Pennington.

6406. Brecher, Sylvia. (Grasslands Hosp., Valhalla, N. Y.) **The Rorschach reaction patterns of maternally over-protected and maternally rejected schizophrenic patients.** *J. nerv. ment. Dis.*, 1956, 123, 41-52.—A series of 50 white, male adult schizophrenics was divided into 2 groups of 25 patients each, the maternally-overprotected and maternally-rejected group, and analyzed for their Rorschach performance. Similarities and differences are discussed. It is concluded that "the nature of the mother-son relationship has some bearing on schizophrenic reactions or symptomatology."—N. H. Pronko.

6407. Buck, Carol; Wanklin, J. M., & Hobbs, G. E. (U. Western Ontario, London, Can.) **Environmental change and age of onset of psychosis in elderly patients.** *A.M.A. Arch. Neurol. Psychiat.*, 1956, 75, 619-623.—To study the possibility that environmental change speeds on the onset of the psychoses of old age, statistical study of records of 516 patients, over 65, was carried out. Among males "the most important . . . is that of an area change" when combined either with retirement or with home-situation change. Neither of the latter types of changes showed any effect. "Among females it was clear that 'earlying' of psychosis was associated with the combined change in area of residence and in home

situation." These findings held true for all diagnostic groups.—*L. A. Pennington.*

6408. Burnham, Donald L. **Misperception of other persons in schizophrenia; a structural view of restitution processes, reality representation, and perception.** *Psychiatry*, 1956, 19, 283-303.—Based on a detailed clinical account of a patient during his third schizophrenic episode and his misperception of other patients and staff members as former acquaintances, celebrities, etc., a schematic reconstruction of the sequence of events during such a psychotic episode is hypothesized. Theoretical discussion of regression and restitution, the representation of reality and perception follows with bibliographical references. In conclusion, these considerations are related to a therapeutic understanding of the schizophrenic.—*C. T. Bever.*

6409. Cameron, John L., Freeman, Thomas, & McGhie, Andrew. **Clinical observations on chronic schizophrenia.** *Psychiatry*, 1956, 19, 271-281.—A report on the clinical observations of schizophrenic patients is part of a larger study of schizophrenia conducted at the Glasgow Royal Mental Hospital. Brief case histories are presented of one patient from a male and one from a female group which met daily for over a year. Criteria for selection of patients are listed and the two groups described. Some clinical observations are discussed as related to communication through the patients' primary-process thinking, regressive behavior and withdrawal.—*C. T. Bever.*

6410. Chambers, Jay L. (*U. Kentucky, Lexington.*) **Perceptual judgment and associative learning ability of schizophrenics and nonpsychotics.** *J. consult. Psychol.*, 1956, 20, 211-214.—"A group of 30 well-preserved, but actively psychotic, schizophrenic subjects were compared with an equal number of nonpsychotic subjects for performance on associative learning and perceptual judgment tasks. The results tended to confirm other research indicating impairment in schizophrenic judgment without loss of accuracy in learning. However, the schizophrenics were significantly slower on both learning and judgment tasks. . . . A combined judgment and learning task failed to disclose differences between the groups of any greater significance than was obtained by tasks which emphasized judgment alone."—*A. J. Bachrach.*

6411. Colony, Henry S. (389 30th St., Oakland, Calif.), & Willis, Stanley E. **Electroencephalographic studies of 1,000 schizophrenic patients.** *Amer. J. Psychiat.*, 1956, 113, 163-169.—A series of available EEG recordings of 1,000 schizophrenics was reviewed and compared with the tracings of a control group of 474 non-psychotic patients without discernible neurological disease and in a comparable age group. Results showed that 5% of schizophrenic records were "abnormal" as indicated by the presence of significant amounts of slow wave activity as compared with 8.3% of the control group with such records. It is concluded that changes in EEG "do not necessarily indicate support for an organic genetically oriented concept of schizophrenia." 11 references.—*N. H. Pronko.*

6412. Conger, John J., Sawrey, William L., Krause, Leonard F., & Stephenson, William. **A reanalysis of Beck's "Six schizophrenias."** *J. con-*

sult. Psychol., 1956, 20, 83-92.—In 3 concurrent papers Conger, Sawrey, and Krause reanalyze Beck's "Six schizophrenias" (see 29: 2760), have their reanalysis replied to by Stephenson, and in turn, reply to Stephenson's critique of their reanalysis.—*A. J. Bachrach.*

6413. Elksich, Paula. **The struggle for ego boundaries in a psychotic child.** *Amer. J. Psychother.*, 1956, 10, 578-602.—Data from the second year of treatment of a case presented in Volume VIII of the "Psychoanalytic study of the child" are discussed. Essentially a symbiotic psychosis, the case of seven-year-old Stanley is discussed from the point of view of the child's conception of substance and identity, and space and time. A discussion by Drs. Max Stern, Helene Papenek, Edrita Fried, Max Friedemann, Simon Wenkart, and Wilfred Hulse is included.—*L. N. Solomon.*

6414. Everett, Evalyn G. **A comparative study of paretics, hebephrenics, and paranoid schizophrenics on a battery of psychological tests.** *Dissertation Abstr.*, 1956, 16, 1502.—Abstract.

6415. Fairbairn, W. Ronald D. **Considerations arising out of the Schreber case.** *Brit. J. med. Psychol.*, 1956, 29, 113-127.—Following a review of Dr. Weber's report on Schreber and Schreber's own account of his illness, Fairbairn reviews Freud's interpretation and theory of paranoia. Finally, it is proposed that an interpretation in terms of object-relations theory is the most appropriate available and the significance of the primal scene with consequent confusion regarding sexual role is discussed, the emphasis being on confusion regarding sexual role adoption not sex.—*C. L. Winder.*

6416. Ferguson, John T. (*State Hosp., Traverse City, Mich.*) **Improved behavior patterns in the hospitalized mentally ill with reserpine and methylphenidylacetate.** *Psychiat. Res. Rep.*, 1956, No. 4, 35-43.—Administration in combination of Serpasil and Ritalin to 225 "back wards" psychotic patients (regardless of diagnosis) over an 8-month period has been accompanied by a "definite chemiophysiological change" for the better. This improvement is discussed with reference to diagnostic categories and to selected aspects of human behavior such as personal appearance, self-care, motor activity, aggressiveness, and socialization.—*L. A. Pennington.*

6417. Goldman, Douglas. (*Longview State Hosp., Cincinnati, O.*) **The major complications of treatment of psychotic states with chlorpromazine and reserpine and their management.** *Psychiat. Res. Rep.*, 1956, No. 4, 79-88.—The incidence of specific side-effects, based on 1,227 cases, is given for chlorpromazine and then followed similarly with a listing for reserpine based on 442 patients studied. Suggestions are given for management of these side-effects.—*L. A. Pennington.*

6418. Goldstein, Arnold P., & Carr, Arthur C. **The attitudes of the mothers of male catatonic and paranoid schizophrenics toward child behavior.** *J. consult. Psychol.*, 1956, 20, 190.—Brief report.

6419. Grant, Vernon W. (*Hawthornden State Hosp., Macedonia, Ohio.*) **Paranoid dynamics: a case study.** *Amer. J. Psychiat.*, 1956, 113, 143-148.—"The intention of this paper is to indicate some features of Kafka's personality and writings which

will have meaning for the clinical psychologist and the psychiatrist, and to call the attention of those not familiar with the novelist to material of definite value for the study of the relationship of guilt conflict to the paranoid syndrome." Certain neurological and electrophysiological differences were observed in patients displaying either ictal depression or ictal fear which warrants a separate grouping of patients experiencing these ictal (i.e., suddenly appearing and again disappearing) emotional reactions.—N. S. Pronko.

6420. Hahn, Irving N. The effects of success and failure experiences on chronic schizophrenic patients. *Dissertation Abstr.*, 1956, 16, 1504-1505.—Abstract.

6421. Harris, William H., & Beauchemin, Joseph A. (Conn. State Hosp., Middletown.) Cerebrospinal fluid calcium, magnesium, and their ratio in psychoses of organic and functional origin. *Yale J. Biol. Med.*, 1956, 29, 117-124.—In 53 patients with varied psychoses, the CSF values obtained deviated from those of non-psychotic patients: a high Ca level with a low Mg level was the pattern of deviation most commonly found (66%). The variations of CSF values were independent of serum Ca and Mg, and indicate abnormal—transitory and reversible—changes in permeability of the blood-brain barrier.—W. A. Wilson, Jr.

6422. Horwitt, M. K. (U. Illinois Coll. Med., Chicago.) Fact and artifact in the biology of schizophrenia. *Science*, 1956, 124, 429-430.—Among variables which should be taken into account in researches on schizophrenia are: (1) emotional stress, tension, and anxiety, (2) nutritional states, (3) liver dysfunction or suboptimal liver function, (4) training, and (5) diurnal variations. Each of these is discussed. Investigators impelled to study the biology of schizophrenia or of other mental disorders should attempt to control the variables mentioned and they must beware of the trap of confusing cause and effect.—S. J. Lachman.

6423. Johnson, Adelaide M., Giffin, Mary E., Watson, E. Jane, & Beckett, Peter G. S. Observations on ego functions in schizophrenia. *Psychiatry*, 1956, 19, 143-148.—Stimulated by the collaborative study of 27 schizophrenics, the authors re-evaluate the ego functions in this disorder. Denial and projection of unbearable reality is developed defensively. Schizophrenics seem to identify with the hostile aggressor and introject parental guilt. Paranoid delusions develop in 8 steps. Implications for treatment in the early stages are outlined with reference to the neurotic patient with episodes of schizophrenia.—C. T. Bever.

6424. Jones, Robert J. A controlled investigation of the effects of Reserpine (Serpasil) on adjustment and tension in hospitalized male psychotics. *Dissertation Abstr.*, 1956, 16, 1495.—Abstract.

6425. Korin, Hyman. The effects of electroconvulsive therapy on retroactive inhibition in schizophrenic and depressive patients. *Dissertation Abstr.*, 1956, 16, 1511-1512.—Abstract.

6426. Kraines, Samuel Henry. Mental depressions and their treatment. New York: Macmillan, 1957. ix, 555 p. \$8.00.—While accepting the influence of psychological factors in modifying, com-

plicating or prolonging the symptoms of manic depressive reactions, the author chooses to postulate an etiology which is a "combination of hereditary susceptibility and a physiologic (often hormonal) precipitating factor." In the 16 chapters of the book, there are over 200 case histories illustrating changes in mood, the influence of physical factors along with hereditary predisposition, affective change, and other disturbances. Sections on psychologic and biologic methods of therapy complete the discussion. A theory of the mechanism and etiology of manic depressive illness is presented. 228-item bibliography.—A. J. Bachrach.

6427. Lidz, Theodore. (Yale U. Sch. Med., New Haven, Conn.), Parker, Buelah, & Cornelison, Alice. The role of the father in the family environment of the schizophrenic patient. *Amer. J. Psychiat.*, 1956, 113, 126-132.—"Study of the personalities of fathers of schizophrenic patients and their roles in the family has shown that few, if any, have filled the paternal role usually expected in middle- and upper-class families, and many exerted seriously pathogenic influences upon the family structure and upon the rearing of the children."—N. H. Pronko.

6428. Limentani, Davide. Symbiotic identification in schizophrenia. *Psychiatry*, 1956, 19, 231-236.—Observations during long-term psychotherapy with 6 adult schizophrenic patients disclose consistently an intimate symbiotic identification with the mother figure. This relationship is described in each case and the manner in which the patients endeavored to cast the therapist in the same role. The dynamics of the therapeutic relationship allow the patient to work through his most infantile personality aspects and to reduce the need to borrow his identity from another person.—C. T. Bever.

6429. Lindsley, Ogden R. (Harvard U., Cambridge, Mass.) Operant conditioning methods applied to research in chronic schizophrenia. *Psychiat. Res. Rep.*, 1956, No. 5, 118-139.—The theoretical and historical background of the method of operant conditioning is first given. This is followed by a description of the modifications necessary in work thus far with 60 psychotic patients and 15 normal subjects. The advantages and disadvantages of this approach, in line with the results presented in overview, are set forth. Pp. 140-153 are given over to a discussion of this paper.—L. A. Pennington.

6430. Lutz, Jacob. Einschränkung der Sehschärfe als Folge seelischer Depression bei einem Kinde. (Reduction of acuity consequent to mental depression in a child.) *Ophthalmologica*, 1956, 131, 388-393.—A significant reduction in acuity disappeared after the depression was cured by psychotherapeutic treatment.—S. Renshaw.

6431. McDonald, Roy E., Ellsworth, Robert B., & Eniss, Jane. (V.A. Hosp., Salt Lake City, Utah.) Behavioral changes of chronic schizophrenics in response to reserpine. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 75, 575-578.—By careful execution of a double-blind experimental design the behavior of 27 chronic patients, 14 receiving placebo, was rated on 3 scales by trained personnel before, during, and after the 73-day treatment period. Results indicated improvement primarily in the areas of "accessibility and contact span."—L. A. Pennington.

6432. McGeer, P. L., McGeer, Edith G., & Gibson, W. C. (U. British Columbia, Vancouver, Canada.) **Aromatic excretory pattern of schizophrenics.** *Science*, 1956, 123, 1029-1030.—"Based on a scale of 11, the average [overall aromatic excretory chromatograph pattern] value for schizophrenics was 6.0 ± 2.5 as compared with 2.8 ± 1.3 for normal individuals. . . . Of the 13 schizophrenics with a chromatographic rating of 3 or less, 10 were responding well to therapy (insulin shock, electroshock, psychiatric treatment); of the 19 schizophrenics with a rating of 8 or more, 18 had shown no response to treatment. . . . In more than 80 percent of the new admissions of schizophrenics, the diagnosis was predictable from the chromatographic results."—S. J. Lachman.

6433. Mangel, H. **Liv'ayat tishtush haishiyut.** (On the problem of depersonalisation.) *Harefuah*, 1956, 50, 195-198.—Depersonalisation according to Störing and Hang is considered. The described case (a 41-year-old woman) was linked with the depressive phase of a manic-depressive psychosis, manifested by tension and inner unrest and by clouding of consciousness. The patient feels wrapped in a veil of light sleep, with a dynamic passivity and general flaccidity. She feels a somewhat blurred state of consciousness and vagueness of reality-perception. The world around her seems to recede far away, and its objective manifestations are echoed as if from a distance. She gives the impression of being intoxicated, apprehensive and as if in a mild twilight state. These states are accompanied by hypnagogic experiences which vanish, and tend to be entirely forgotten. English and French summaries.—H. Ormian.

6434. Modell, Arnold H. **Some recent psychoanalytic theories of schizophrenia.** *Psychoanal. Rev.*, 1956, 43, 181-194.—There is uniformity of opinion that primitive or unneutralized aggression is of central importance in the development of schizophrenia. The theories of Klein, Pious, Jacobson, Freud, Mahler, Eissler, Hendrick, Wexler, and Hartman are considered. Object representatives within ego and superego do not become integrated. These charged, unassimilated introjected objects are ready to re-emerge and assume the function of real objects should there be a massive cathectic withdrawal. This structural decomposition may most clearly distinguish schizophrenia from the neuroses. 32 references.—D. Prager.

6435. Myers, Jerome K. (Yale U., New Haven, Conn.) **An empirical approach to the study of schizophrenia.** *Psychiat. Res. Rep.*, 1956, No. 5, 29-38.—By methods based upon social stratification concepts a sociological and psychiatric approach to behavior disorders in the New Haven area is set forth. Results indicated "3 clusters common to our patients" as follows: "submissive and dominated persons who were considered different from an early age. They also had a father who was an inadequate in the rearing situation. They, as children, were left on their own, were looked after by older children, and resented it." Pp. 39-48 are given over to reports of the discussion that followed presentation of the paper.—L. A. Pennington.

6436. Naidoo, D. **The effects of reserpine (serpasil) on the chronic disturbed schizophrenic: a comparative study of rauwolfia alkaloids and elec-**

troconvulsive therapy. *J. nerv. ment. Dis.*, 1956, 123, 1-13.—The effect of Serpasil was studied in a series of 80 severe, chronic schizophrenic patients to determine whether its use is equal, superior or inferior to electroconvulsive therapy. Results from 4 matched groups employing placebos also showed that Serpasil was superior to maintenance shock treatment. 28 references.—N. H. Pronko.

6437. Pauleikhoff, Bernhard. (U. Münster, Germany.) **Atypische Psychosen.** (Atypical psychoses.) *Bibl. psychiat. neur.*, 1957, No. 99, 141 p.—Following a review of pertinent literature, the author discusses illustrative cases of atypical psychoses from the Psychiatric Clinic of Heidelberg. He notes the difficulties of differential diagnoses, particularly between some symptoms of schizophrenia and depression, but concludes that Kraepelin's schema is still satisfactory provided it is not rigidly construed. There is a need for reconsidering diagnostic classifications and the negative implications of labelling a patient schizophrenic.—H. P. David.

6438. Penman, Allen S. (V.A. Hosp., St. Cloud, Minn.), & Dredge, Thomas E. **Effect of reserpine and open-ward privileges on chronic schizophrenics.** *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 42-49.—Medical and psychological studies of 80 patients, before, during, and after the experimental administration of reserpine (with appropriate control groups) for 90 days indicated no evidence for improvement as measured by the L-M Fergus Falls Behavior Rating Scale and by The Minnesota Multiphasic Personality Inventory. "Awarding of open-ward privileges did not result in improved interpersonal relationships or behavioral improvement" among patients receiving reserpine, placebo, or no medication. Drug therapy, however, was accompanied by a lowering of blood pressure and slight gain in weight. These results are discussed in relation to other studies wherein findings have been, behaviorally speaking, the reverse.—L. A. Pennington.

6439. Raskin, Naomi, & Ehrenberg, Ruth. (Boston State Hosp., Mass.) **Senescence, senility and Alzheimer's disease.** *Amer. J. Psychiat.*, 1956, 113, 133-137.—Clinical and neurological findings are reported from a post-mortem review of 270 patients ranging from 60-97 years of age. A range of neurological as well as clinical findings were observed. "The degree of brain atrophy was not always indicative of the patient's mental deterioration." 24 references.—N. H. Pronko.

6440. Rudy, L. H., Rinaldi, F., & Himwich, H. E. (State Res. Hosp., Galesburg, Ill.) **Comparative effects of azacyclonol, reserpine, and chlorpromazine on moderately disturbed psychotic patients with long histories of hospitalization.** *Psychiat. Res. Rep.*, 1956, No. 4, 49-63.—Clinical evaluations of 40 patients suggested that reserpine was most effective with the hebephrenic and hebephrenic-catatonic patients. Chlorpromazine was most beneficial with the paranoid patients. The schizoaffective patients showed most improvement with chlorpromazine. These and other results are discussed with reference to physiology and pharmacology.—L. A. Pennington.

6441. Saavedra, Alfredo. **Formas atípicas de esquizofrenia.** (Atypical forms of schizophrenia.)

Rev. Neuro-Psiquiat., Lima, 1956, 19, 1-97.—A comprehensive discussion on the history of and classification and characteristics of schizophrenia is followed by critical observations on 20 atypical cases. English, French and German summaries.—R. M. Frumkin.

6442. Sacher, Horst. **Eintönige Lösungen bei Hebephrenen im Pyramidentest mit geordnetem Farbangebot.** (Monotonous solutions of hebephrenics at the color pyramid test with orderly color stimulation.) *Z. exp. angewand. Psychol.*, 1955-56, 3, 547-574.—A modified method of presenting the color pyramid test is used as a tool for differential diagnosis between apathetic-autistic hebephrenics and phenotypically similar schizoid character disorders. English and French summaries.—W. J. Koppitz.

6443. Sands, Dalton E. **The psychoses of adolescence.** *J. ment. Sci.*, 1956, 102, 308-318.—Study of 146 psychotics at St. Ebba's Hospital showed very few manic-depressives, and most schizophrenics, 85% of whom were eventually discharged to their homes. Dynamic and therapeutic factors are discussed.—W. L. Wilkins.

6444. Scott, Edward M. (Eastern Oregon State Hosp., Pendleton.) **Regression or disintegration in schizophrenia?** *J. clin. Psychol.*, 1956, 12, 298-300.—"The Rorschach and Bender-Gestalt Tests were administered to 37 schizophrenics routinely admitted . . . only those patients between 15 and 50 with a high school education were used. . . . The results, based on M- as compared to FM-; and M- matched with m seem to indicate, since M- occurred significantly more often, that schizophrenia is more of a disintegrative nature than of a regressive nature, though this latter component does appear (FM occurred significantly more often than m)."—L. B. Heathers.

6445. Shapiro, Arthur K. (Wayne County General Hosp., Eloise, Michigan.) **An attempt to demonstrate a catatonigenic agent in cerebrospinal fluid of catatonic schizophrenic patients.** *J. nerv. ment. Dis.*, 1956, 123, 65-71.—Concentrated cerebrospinal fluid from catatonic and mental defective patients, as well as an isotonic saline and an artificially-reconstituted cerebrospinal fluid solution was injected subcutaneously into rats in order to test the hypothesis that there is a catatonigenic agent in the cerebrospinal fluid of catatonic patients. Results did not substantiate such a hypothesis. 20 references.—N. H. Pronko.

6446. Shepherd, Michael, & Watt, David C. **A controlled clinical study of chlorpromazine and reserpine in chronic schizophrenia.** *J. Neurol. Neurosurg. Psychiat.*, 1956, 19, 232-235.—"A clinical trial designed to compare the efficacy of chlorpromazine and reserpine in the treatment of 24 chronic schizophrenic patients has been described. The results indicate that chlorpromazine was responsible for improvement in a significantly higher proportion of cases than reserpine and that, in the doses employed, reserpine was responsible for the great majority of toxic effects observed."—M. L. Simmel.

6447. Stotsky, Bernard A. (VA Hosp., Brockton, Mass.) **Vocational tests as measures of performance of schizophrenics in two rehabilitation activities.** *J. clin. Psychol.*, 1956, 12, 236-242.—Groups (varying N's) of chronic schizophrenics were

ranked for general work behavior in educational (ET) or manual arts (MAT) therapy and then classed as high or low in work performance, improved or not improved in NP status. A devised interest test consisting of items related to ET and MAT activities differentiated between ET and MAT groups but not between good and poor workers in either group. A devised mechanical information test differentiated between good and poor workers and between improved and unimproved patients in MAT. A general ability test and some clerical measures made similar differentiations for the ET group. It is concluded that aptitude tests can be useful in planning and predicting the outcome of rehabilitation treatment.—L. B. Heathers.

6448. Swenson, W. M., Gislason, Solvig, & Anderson, D. E. (St. Peter State Hosp., Minn.) **Behavioral evaluation of chronic mental hospital patients treated with reserpine.** *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 60-64.—Comparative analysis of ratings made before, during, and after a 5-month interval in which 50 "back ward" patients were given reserpine (a control group was given the placebo) indicated that the dosages used (1 mg for 2 months; 2 mg for 3 months) had "little or no measurable impact on behavior." The L-M Fergus Falls Behavior Rating Scale and the Lorr-Jenkins Multidimensional Scale were used.—L. A. Pennington.

6449. Tewfik, G. I. (Middlewood Hosp., Sheffield, Eng.) **A review of the psychotic elderly resident in a mental hospital.** *J. ment. Sci.*, 1956, 102, 247-263.—Experience in a geriatric unit of 200 female and 110 male beds is cited to show problems of classification, physical status, management, and treatment. 18 references.—W. L. Wilkins.

6450. Thornton, Nathaniel. **Some notes on schizoid personality.** *Psychoanal. Rev.*, 1956, 43, 220-227.—Some schizoids from the beginning concentrate their psychic energy largely on themselves and seem to live and find satisfactions within themselves. Schizoid withdrawal is as much an original predisposition as it is reactive to danger or frustration.—D. Prager.

6451. Usov, A. G. **Èksperimental'nye dannye k mekhanizmu bredobrazovaniia pri starcheskikh psikhozakh.** (Experimental data on the mechanism of delirium formation in senile psychoses.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6(1), 93-99.—A modified verbal experiment, involving conditioned blinking, respiratory, and cardio-vascular reflexes, was carried out on 3 senile psychotics exhibiting a delirium syndrome. The experimental findings obtained confirm Pavlov's concept of the delirium mechanism and prove that the pathophysiological basis of the "delirious idea" in the investigated forms of senile psychosis is to be found in a focal "inert excitation" mainly within the second signal system.—I. D. London.

6452. Van den Broek, P. **L'application des tests de Rorschach et de Behn-Rorschach dans le cas d'une schizophrénie naissante.** (Application of the Rorschach and Behn-Rorschach in a case of incipient schizophrenia.) *Z. diagnost. Psychol.*, 1956, 4, 186-196.—In this case study of a 22-year-old man, Rorschach data obtained 1.5 years before a sudden schizophrenic episode are compared with a Behn-Rorschach

protocol administered "a few months" after onset. English and French summaries.—H. P. David.

6453. Wagner, Nathaniel Ned. The performance of schizophrenic individuals with high and low levels of anxiety following frustration. *Dissertation Abstr.*, 1956, 16, 1287.—Abstract.

6454. Westcott, G. F. (Central State Hosp., Petersburg, Va.) Serpasil as an adjunct to brief intensive psychotherapy with two psychotic patients. *J. nerv. ment. Dis.*, 1956, 123, 53-56.—Two cases of schizophrenia were successfully treated by brief intensive psychotherapy with adjunctive use of Serpasil. Factors influencing the remissions are discussed.—N. H. Pronko.

6455. Whiteman, Martin. (U. Delaware, Newark.) Qualitative features of schizophrenic thought in the formation of social concepts. *J. nerv. ment. Dis.*, 1956, 124, 199-204.—A group of 31 schizophrenics and 31 matched normal controls were studied in an effort to describe qualitative differences in their thinking. Significant differences were not observed between the groups in the classification of responses along an emotionally negative and non-negative dimension, although the schizophrenic sample more frequently showed a greater frequency of reactions that gave evidence of emotional factors. These results are interpreted.—N. H. Pronko.

6456. Williams, Moyra. (United Oxford Hosp., Oxford, Eng.) Spatial disorientation in senile dementia; the psychological mechanisms disturbed and some suggested methods of compensation. *J. ment. Sci.*, 1956, 102, 291-299.—Because some senile patients get disoriented and have a desire to wander, a test was devised to determine how affected on maze tests such patients were. Sixty, CA 65 to 95, were examined. Preliminary practice markedly helps performance, but direction and clarity of goal and complexity of the task are crucial too.—W. L. Wilkins.

6457. Yrurita, Luis. Estudio de algunos aspectos de la función suprarrenal en la esquizofrenia. (Study of some aspects of suprarrenal function in schizophrenia.) *Rev. Neuro-Psiquiat.*, Lima, 1956, 19, 124-131.—Posits an endocrine theory of mental disorder based on the finding that endocrine changes accompany mental disorder. Suggests that hormonal treatment be used in curing mental patients. English, French and German summaries.—R. M. Frumkin.

6458. Zeichner, Abraham. (Fairfield State Hosp., Conn.) Conception of masculine and feminine roles in paranoid schizophrenia. *J. proj. Tech.*, 1956, 20, 348-354.—Paranoid schizophrenics, non-paranoid schizophrenics, and normals (all males) were compared on the Rorschach and selected TAT cards with respect to conception of the masculine and feminine roles. "The paranoid group was not differentiated significantly from the non-paranoid group in any of the comparisons. . . . It was concluded that the two schizophrenic groups differed from the normal group in their interpretation of the masculine role, but did not differ in their concept of the feminine role."—A. R. Jensen.

(See also abstracts 6077, 6233, 6240, 6248, 6254, 6265, 6267)

PSYCHONEUROSES

6459. Astrup, Christian. Erfahrungen mit verschiedenen bedingt-reflektorischen Untersuchungsmethoden an Neurotikern. (Experiences with various conditioned reflex experiments in neurotics.) *Psychiat. Neurol. med. Psychol.*, Leipzig, 1956, 8, 161-172.—The disturbances of nerve processes were quantitatively investigated with complex conditioned reflex experiments in 55 neurotic patients with diagnosis of neurasthenia in 20, hysteria in 8, psychasthenia in 3, phobia in 6, ties in 5. The results are tabulated and discussed according to the weakness of the excitatory and inhibitory processes, the disturbances of mobility and the collaboration of the signal systems. 20 references.—C. T. Bever.

6460. Dongier, M., Wittkower, E. D., Stephens-Newsham, L., & Hoffman, M. M. (McGill U., Montreal, Can.) Psychophysiological studies in thyroid function. *Psychosom. Med.*, 1956, 18, 310-323.—Clinical and medical study of a series of adult psychiatric patients indicated that it is possible to predict the rate of thyroid secretion with reasonable accuracy from a "psychodynamic assessment of neurotic patients (provided that the rapidity of disappearance of I^{131} from the thyroid gland can be regarded as a reliable index of its function)." These findings are "considered as an experimental verification of previous psychosomatic studies in hyperthyroidism." 39 references.—L. A. Pennington.

6461. Hildebrand, H. P. (Tavistock Clinic, London, Eng.) Utilisation du questionnaire d'introversion-extraversion de Guilford sur une population névrotique. (Utilization of Guilford's introversion-extraversion questionnaire on a neurotic population.) *Rev. Psychol. appl.*, 1956, 6, 179-185.—The Guilford-Martin questionnaire was administered to 145 hospitalized neurotics: 25 cases of conversion hysteria, 25 anxiety states, 20 psychopaths, 10 obsessional states, 10 reactive depressions, and 55 with mixed symptoms. Only the R-scale differentiated the anxiety states from the hysterics. Factor analysis revealed 2 orthogonal factors, neuroticism and introversion-extraversion. The R-Scale had weak saturation with neuroticism and strong with introversion-extraversion.—W. W. Wattenberg.

6462. Ramana, C. V. Transference in borderline neurosis. *Psychoanal. Rev.*, 1956, 43, 129-145.—These patients find it very difficult to follow the basic rule. They cannot at first identify themselves with the analyst and the analytic process. The early history of these patients shows extreme reality deprivations. The patient lives on and for his superego. The analyst's admission of having felt hateful to the patient at times allows the patient to gradually relinquish the magical elements in his hate. "The analyst and the transference relationship are but meager substitutes for the all important affective and active identification of the child with the mother. The successful outcome of analysis depends upon the extent to which the analyst is able to offer the patient the substitute identification with the least amount of anxiety." 26 references.—D. Prager.

6463. Tashman, Harry F. Today's neurotic family; a journey into psychoanalysis. New York: New York University Press, 1957. 214 p. \$3.95.—A new approach to patient's neuroses and the neurotic

patterns of parent figures, that considers individuals basically in their relation to the family. For every patient the author finds one or more commonly both, parents so disturbed, so starved at their beginnings, that they have been unable to give their child the love and support necessary for his well-being. Since it is with the family that personality begins, cure must involve adjustment to the real world around the patient including his family, rather than the individual's symbolic realization alone.—*C. Tague.*

6464. Tushinskaia, M. M. *Izuchenie vysshei nervnoi deiatel'nosti u bol'nykh nevrozami tipa nevrazenii.* (Study of higher nervous activity in patients with neurasthenic type of neuroses.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6(1), 108-112.—The higher nervous activity of 30 neurasthenics was studied by means of the conditioned blinking reflex. In 17 neurasthenics the conditioned reflex, in spite of 100 combinations, was either never established or, if it was, appeared rather unstable and failed to reappear after extinction. In 6 neurasthenics the conditioned reflex was established beginning with the 3rd to 11th combination and rapidly became stable, but extinction of the conditioned reflex proceeded slowly. In 7 neurasthenics the conditioned reflex was rapidly established, stabilized, and extinguished, though the elaboration of differentiation involved some difficulty.—*I. D. London.*

6465. Tyndel, Milo. (*Hosp. Mental Dis., Brandon, Manitoba, Can.*) *Some aspects of the Ganser state.* *J. ment. Sci.*, 1956, 102, 324-329.—The mild depression with hysterical symptoms and malingering is typical of the ageing male patient with neurotic disorder under the care of oversolicitous relatives, breaking down in a situation of unusual stress of social, financial or psychological nature.—*W. L. Wilkins.*

(See also abstracts 5378, 5526, 6233, 6248, 6265, 6751)

PSYCHOSOMATICS

6466. Aldrich, C. Knight. *Emotional problems in convalescence.* *Industr. Med. Surg.*, 1956, 25, 245-247.—"Emotional problems of convalescence, either prolonged or shortened, stem from unsolved dependency problems which revert to early childhood. The application of techniques to determine whether a patient longs for, prefers, fears, or is ashamed of dependency gives the physician an opportunity to take steps to counteract the patient's intrapersonal tendencies toward an unsatisfactory convalescence."—(Courtesy of *Rehab. Lit.*)

6467. Bacon, Catherine L. *The role of aggression in the asthmatic attack.* *Psychoanal. Quart.*, 1956, 25, 309-324.—"Clinical evidence suggests that asthma and other forms of respiratory anxiety may be precipitated by nascent aggressive feelings, involving anal, urethral, or sexual excretory impulses. Stimulation of the excretory mucous membranes by these fantasies sensitizes the respiratory mucous membrane, just as physical stimulation of the excretory membranes stimulates respiration. The nascent excretory aggression arouses fears of excretory aggression from the outside world." A talion attack upon the respiratory apparatus is thus expected and this apparatus responds physiologically as though it were really attacked by noxious substances.—*L. N. Solomon.*

6468. Bard, Morton, & Dyk, Ruth B. *The psychodynamic significance of beliefs regarding the cause of serious illness.* *Psychoanal. Rev.*, 1956, 43, 146-162.—A belief is a psychologically unique process which originates as a reality perception, is influenced by individual life experience, is integrated into a system of character defenses, and functions as a basis for action. Beliefs afford clues to understanding responses to stress. 47 cancer patients spontaneously expressed 72 beliefs regarding the cause of illness. These beliefs were either self-blaming or projective. Virtually everyone confronted with serious illness develops a belief of causation. The belief is prevalent that interpersonal relations can cause severe physical illness. There was no significant correlation between beliefs and cultural, educational, and religious factors.—*D. Prager.*

6469. Barnes, Robert H. *Certain of the problems in arriving at a psychodynamic formulation of specific psychological factors producing psychosomatic illness.* *Psychiat. Res. Rep.*, 1956, No. 3, 84-86.—The meaning of the physical symptom to the patient may interfere with the investigator's efforts to arrive at a psychodynamic picture. Illustrations are given along with suggestions whereby this factor can be taken into consideration.—*L. A. Pennington.*

6470. Billig, Otto. *Projective techniques.* *Psychiat. Res. Rep.*, 1956, No. 3, 50-51.—"Can we differentiate between the various psychosomatic illnesses by the projective techniques? The available reports are contradictory." The uses and limitations of the method are briefly described.—*L. A. Pennington.*

6471. Brooks, B. E., & Kenfield, C. J. *An emotional dental problem. (A case history.)* *J. Amer. Soc. psychosom. Dent.*, 1956, 3(2), 13-15.—The procedure for, and results of, use of hypnosis and Nitrous Oxide for 6 visits on a "particularly difficult and unmanageable patient" are described.—*J. H. Manhold, Jr.*

6472. Cohen, Louis D. *A note on the repetition of experiments.* *Psychiat. Res. Rep.*, 1956, No. 3, 39-42.—Repetition of aspiration level studies with asthmatic Ss revealed opposite results each of which was statistically reliable. A plea is accordingly made for replication of experiments and for careful study of "elusive variables."—*L. A. Pennington.*

6473. Crasilneck, H. B., McCranie, E. J., & Jenkins, M. T. (*U. Tex., Sthwest. Med. Sch., Dallas.*) *Special indications for hypnosis as a method of anesthesia.* *J. Amer. med. Ass.*, 1956, 162, 1606-1608.—Hypnosis was used successfully as a method of anesthesia in a variety of seriously ill patients in which chemical anesthesia was contraindicated. The types of cases included obstetrical, gynecological, neurosurgical, and general surgical problems.—*C. M. Michael.*

6474. Engel, George L. (*U. Rochester, N. Y.*) *Studies of ulcerative colitis. IV. The significance of headaches.* *Psychosom. Med.*, 1956, 18, 334-346.—Study of 23 consecutive patients showed that 87% also suffered from headaches, including migraine, muscle-tension, and hysterical conversions. Study of the headache periods, along with the symptom of bleeding, revealed both to reflect psychodynamic

aspects of the patients' personalities. 7 case reports are given. 16 references.—L. A. Pennington.

6475. Fisher, Seymour, & Cleveland, Sidney E. (V.A. Hosp., Houston, Tex.) **Relationship of body image to site of cancer.** *Psychosom. Med.*, 1956, 18, 304-309.—Selected study of Rorschach productions given by 59 patients with body-exterior cancer and by 30 with body-interior cancer indicated at levels of statistical significance the former group had a greater tendency to "conceive of the body as enclosed by an impenetrable boundary." "Differences in body-image scores (for the 2 groups) seem to reflect basic differences in personality orientation . . . personality variables may play a significant role in the total complex of factors that determine the site of development of cancer in an individual."—L. A. Pennington.

6476. Greene, William A., Jr., Young, Lawrence E., & Swisher, Scott N. (U. Rochester, N. Y.) **Psychological factors and reticuloendothelial disease. II. Observations on a group of women with lymphomas and leukemias.** *Psychosom. Med.*, 1956, 18, 284-303.—Medical and interview studies of 26 women led to the inference that one of the multiple conditions operating in the development of these illnesses was unresolved attachment to mother figures. Losses, separations, and threats of separations were present prior to onset of the illnesses. "Separation from a key object or goal with ensuing depression" may be one of the etiological factors. 19 references. (See 29: 2879.)—L. A. Pennington.

6477. Harms, Ernest. Friederich C. G. Scheidemann: **the first systematic text in psychosomatic medicine (1787).** *J. ment. Sci.*, 1956, 102, 300-307.—*Die Leidenschaften als Heilmittel*, published in 1787, outlines how various emotions (passions) affect bodily adjustment and how they could be effectively used in therapy.—W. L. Wilkins.

6478. Hetzel, B. S., Grace, W. J., & Wolff, H. G. (Cornell Med. Cent., New York.) **General metabolic changes during stressful life experiences in man.** *J. Psychosom. Res.*, 1956, 1, 186-202.—Determinations of gaseous exchange and total nitrogen excretion made before, during, and after "acute stressful interviews in euthyroid, hypothyroid, and adrenal-ectomized Ss" show that "there is a significant rise in oxygen consumption and a fall in respiratory quotient. This pattern suggests increased fat metabolism." There are also significant increases in urinary nitrogen excretion. "The data suggest that the metabolic pattern characteristic of the response to surgical trauma may also be elicited in response to threats in the form of stressful life situations." 21 references.—L. A. Pennington.

6479. Hetzel, B. S., Schottstaedt, W. W., Grace, W. J., & Wolff, H. G. (Cornell Med. Cent., New York.) **Changes in urinary nitrogen and electrolyte excretion during stressful life experiences, and their relation to thyroid function.** *J. Psychosom. Res.*, 1956, 1, 177-185.—Study of euthyroid and hypothyroid Ss indicated an increment in nitrogen and potassium excretion in the former without any difference in urine flow. "Greater percentage changes in total nitrogen and electrolyte excretion were observed in the latter Ss when each was given 1 mg. l-tri-iodothyronine." This suggests that the thyroid "may be participating in a rapid metabolic

adjustment," the mechanism of which remains unknown. 29 references.—L. A. Pennington.

6480. Hill, T. S. **Stress.** *Psychiat. Res. Rep.*, 1956, No. 3, 7-9.—Results from studies using methods of electrolytic and water balances, shifts of protein fractions, and the intravascular agglutination as applied to cases of premenstrual tension and associated "psychoses" are briefly reviewed and then discussed in relation to the concept of stress as developed by Selye.—L. A. Pennington.

6481. Johnson, Laverne C. (Washington U., Seattle.) **Body cathexis as a factor in somatic complaints.** *J. consult. Psychol.*, 1956, 20, 145-149.—"Fifty-two male seminary students and ninety-five student nurses were administered the BC and SC scales and the Cornell Medical Index. A significant relationship was found between BC and SC, cross validating Secord's and Jourard's findings. Attitude toward the body and toward the self was found to be stable over a period of time. A moderate inverse relationship was found between attitude toward the body and number of somatic symptoms reported. Women had lower BC scores than men and reported a larger number of symptoms. The social importance of the female body and the training and interest of the student nurses in illness are offered as possible explanations."—A. J. Bachrach.

6482. Leigh, Denis. (Maudsley Hosp., London, Eng.), & Marley, Edward. **A psychiatric assessment of adult asthmatics: a statistical study.** *J. Psychosom. Res.*, 1956, 1, 128-136.—Administration of the Cornell Medical Index Health Questionnaire to groups of asthmatics, neurotics, and control Ss indicated, upon statistical analysis, that all groups of asthmatics showed more inadequacy and tension than did the control Ss. Asthmatics seen by the psychiatrist revealed significantly more depression and anxiety than did the controls. These and other results are discussed in relation to the general physician's need for caution in assuming the condition an allergic one. "It accents the need for teamwork in this disorder."—L. A. Pennington.

6483. Leigh, Denis. (Maudsley Hosp., London, Eng.), & Pond, D. A. **The electroencephalogram in cases of bronchial asthma.** *J. Psychosom. Res.*, 1956, 1, 120-127.—Study of 55 asthmatics and of 68 adult controls diagnosed as psychopathic states and severe neuroses showed an equally high incidence of brain wave abnormalities (40%) in both groups. This datum "suggests we are dealing with a constitutional anomaly of the E.E.G." Further study on the "psychiatric genetics of asthmatics" is advocated.—L. A. Pennington.

6484. Lewinsohn, Peter M. (State Hosp., Oswatimie, Kans.) **Personality correlates of duodenal ulcer and other psychosomatic reactions.** *J. clin. Psychol.*, 1956, 12, 296-298.—Four groups of 15 VA hospital patients each—non-psychiatric patients, anxiety neurotics, patients with duodenal ulcers, and patients with essential hypertension—were given the MMPI and the Rosenzweig PFS. The PFS did not differentiate any of the groups. The anxiety group was higher on all MMPI scales than the normals, on all scales but Hs and Hy than the ulcer and hypertension groups. The latter groups were significantly higher than the normals on Hs, D, Hy, and Pd. The

hypertension group was also significantly higher than the normals on Pt. MMPI scales were not K-corrected.—*L. B. Heathers.*

6485. Lewinsohn, Peter M. (*Johns Hopkins U., Baltimore, Md.*) **Some individual differences in physiological reactivity to stress.** *J. comp. physiol. Psychol.*, 1956, 49, 271-277.—Patients with duodenal ulcer, essential hypertension and neuromuscular tension were given Cold Pressor and Failure stress tests, heart rate, skin conductance, salivary secretion and finger tremor being recorded. The Cold test and Failure test both elicited significant increases in skin conductance and finger tremor; the Cold test also increased salivary output, and the Failure test increased heart rate. The ulcer group had higher initial skin conductance and salivary output than the other groups. No differentiation between groups as a result of stress was secured. Other correlations with Taylor Scale and with MMPI subscales are reported.—*L. I. O'Kelly.*

6486. Lopez Ibor, J. J. (*Madrid U., Spain.*) **Problems presented by asthma as a psychosomatic illness.** *J. Psychosom. Res.*, 1956, 1, 115-119.—The problem of asthma "must take particular account of the frequently phasic occurrence of the disease, with at times the substitution of other psychosomatic disorders," such as migraine, or alternating with depressions, obsessional and phobic reactions. Suggestions are made whereby psychodynamic and physiological studies of young patients developing asthma might yield valuable insights into this time factor.—*L. A. Pennington.*

6487. Moran, Louis J., Fairweather, George W., Fisher, Seymour, & Morton, Robert B. (*VA Hosp., Houston, Tex.*) **Psychological concomitants to rate of recovery from tuberculosis.** *J. consult. Psychol.*, 1956, 20, 199-203.—"Rate of recovery from tuberculosis was estimated for 46 patients by the amount of time required for bacteriological conversion to occur. This criterion was then correlated with 4 classes of psychological measures. Variability in rate of recovery from tuberculosis was found to be associated with adaptive behavior on the ward, associated to some degree with measures of fantasy, and unrelated to expressed attitudes or to prehospital behavior, as measured. A cluster of positive correlations was then derived from the total matrix, and hypotheses offered concerning personality 'syndromes' associated with fast recovery and slow recovery from tuberculosis."—*A. J. Bachrach.*

6488. Moran, Louis J., Fairweather, George W., & Morton, Robert B. **Some determinants of successful and unsuccessful adaptation to hospital treatment of tuberculosis.** *J. consult. Psychol.*, 1956, 20, 125-131.—"This study examined some relationships of the tuberculous patient's (a) family of orientation, (b) prehospital life adjustment, (c) verbalized attitudes toward situations in the hospital, (d) behaviors in the hospital, and (e) current outside-the-hospital situations, to his success or lack of success in remaining in the hospital until his treatment was completed. . . . It was concluded that hospitalization is but the most recent of a long series of life situations in which the irregular discharge patient has demonstrated his inability to make an adequate adjustment."—*A. J. Bachrach.*

6489. Rees, Linford. (*Maudsley Hosp., London, Eng.*) **Physical and emotional factors in bronchial asthma.** *J. Psychosom. Res.*, 1956, 1, 98-114.—Medical and psychiatric examinations of 441 patients attending asthma and allergy clinics along with 321 Ss used for control purposes indicated that the disorder is of multiple causation. It is necessary therefore to consider and assess all the causative factors in the individual case. "Genetic, constitutional, autonomic, endocrine, neurosis, emotional tension, allergic, infective and various environmental forces may be relevant and causal." Emotional reactions were found to precipitate attacks in many patients in all age groups. "All varieties of emotional tension, ranging from pleasurable excitement and elation to anxiety and depression were found." 58 references.—*L. A. Pennington.*

6490. Rees, Linford. (*Maudsley Hosp., London, Eng.*) **Psychosomatic aspects of asthma in elderly patients.** *J. Psychosom. Res.*, 1956, 1, 212-218.—Clinical study of 50 asthmatic patients, aged 60 and over, suggests that the disorder in this age group is of multiple causation with psychological and infective factors occupying a more important role than allergy. Understanding of the personality and life situation is of "paramount importance in the treatment of asthma in elderly patients." No specific personality type was found.—*L. A. Pennington.*

6491. Rodnick, Eliot. **Definitions of psychological variables in psychosomatic research.** *Psychiat. Res. Rep.*, 1956, No. 3, 35-38.—Problems of identification, definition, measurement, and manipulation of psychological variables are discussed. The plea is made for "greater use of experimental manipulation of variables" and for the greater utilization of "experimental techniques that in other areas of psychology are relevant to general behavioral theory." As an illustration of the latter is the field of perception and its methods of study as contrasted with the tendency in the past to overdo the use of the Rorschach and related projective tests.—*L. A. Pennington.*

6492. Sapir, Philip. **Reviewing and evaluating proposals in the field of psychosomatic medicine.** *Psychiat. Res. Rep.*, 1956, No. 3, 29-33.—Discussion of the reasons for refusal of applications for research grants (24 instances) is contrasted with reasons for approval in 38 instances of application for aid in psychosomatic research projects. These observations led to a series of suggestions regarding the planning of well-controlled studies.—*L. A. Pennington.*

6493. Schottstaedt, W. W., Grace, W. J., & Wolff, H. G. (*Cornell Med. Cent., New York.*) **Life situations, behaviour, attitudes, emotions, and renal excretion of fluid and electrolytes. III. Diuresis of fluid and electrolytes.** *J. Psychosom. Res.*, 1956, 1, 203-211.—Study of normal Ss in 30 life situations accompanied by anxiety showed an increase in renal excretion rates of water and sodium. In 22 "anger" situations the excretion rates were also increased. Situations evoking "mixed reaction patterns . . . were accompanied by excretion rates intermediate" between the "anxiety" and "anger" patterns aforementioned. These patterns were also obtained in laboratory settings.—*L. A. Pennington.*

6494. Shands, Harley C. Individual as differentiated aspect of the field. *Psychiat. Res. Rep.*, 1956, No. 3, 87-88.—It is suggested that an "individual" is not "a given but is rather an idea or construct developed out of a long series of perceptual experiences through a learning process." It is judged that this view leads to the investigator seeing the patient as a function of the situation. Exploration of the various situations can provide much information of value in the psychodynamic formulation for psychosomatic research purposes.—L. A. Pennington.

6495. Smith, Harvey L. Social science in psychosomatic research. *Psychiat. Res. Rep.*, 1956, No. 3, 52-55.—A series of studies, "getting under way," dealing with the social and cultural factors operative in health and illness is described. The project provides an opportunity for the social scientist and the anthropologist to contribute to the clinical team approach through methodology and hypothesis formation.—L. A. Pennington.

6496. Sutherland, J. M., (Aberdeen Royal Infirmary, Aberdeen, Scotland), & Rosie, J. M. Cerebral cysticercosis with mental symptoms. *J. ment. Sci.*, 1956, 102, 343-344.—A single case of a soldier who had service in India illustrates diagnostic problems. Distribution of the disease, while rare, is such that it may be suspected in persons who have once lived in India, Poland, Portugal, South America or the southern part of Italy.—W. L. Wilkins.

6497. Tournay, Garfield. (Lafayette Clin., Detroit, Mich.) The use of the hypnotically induced complex in psychosomatic research. *Psychiat. Res. Rep.*, 1956, No. 3, 74-76.—The method of artificially induced conflicts is suggested as a testing ground for the determination of the accuracy of rival theories as to specificity or nonspecificity of psychosomatic illnesses.—L. A. Pennington.

6498. von Diringshofen, Heinz. The preventive psychosomatic concept of the flight surgeon in active air defense. *J. Aviat. Med.*, 1956, 27, 153-155.—The role of the flight surgeon in current aviation is discussed. Stress is placed on the concept of preventive psychosomatic medicine as a requisite to the complete task of the flight surgeon.—J. M. Vanderplas.

6499. von Lackum, William J. Response to anxiety and stress. *Psychiat. Res. Rep.*, 1956, No. 3, 43-45.—The variables involved in experiments on psychophysiological problems in psychosomatic research are described and a plea made for their identification and measurement. By the use of illustrative studies inconsistencies in findings are reported therewith pointing to the need for more "rigorously controlled experimental procedures."—L. A. Pennington.

6500. Watkins, Charles. (Louisiana State U., New Orleans.) Research: data and design. *Psychiat. Res. Rep.*, 1956, No. 3, 81-82.—In the effort to study psychodynamics in psychosomatic research investigations more concern is usually given to physiological measurements. The suggestion is made that equal attention be paid the former by the use of the analyst. The author concludes that there is no dearth in data but rather in objectivity and dynamic orientation.—L. A. Pennington.

6501. West, Louis Jolyon. (U. Oklahoma, Oklahoma City.) Psychodynamic causality in psychosomatic research: problems of experimental design. *Psychiat. Res. Rep.*, 1956, No. 3, 77-80.—Rival theoretical viewpoints in psychosomatic medicine make objectivity in research extremely difficult. Data collection, "if they are truly to contribute to our concepts of causality in psychosomatic medicine, requires a detached and objective attitude. . . ."—L. A. Pennington.

6502. Zellermyer, J. Kavey ofi v'emtsaey havana b'mahlot psihosomatiyot. (Character traits and defense mechanisms in psychosomatic disorders.) *Harefuah*, 1956, 50, 79-83.—Psychological observations of patients suffering from psychosomatic disorders reveal several traits: Extreme affect-control, reaching at times a degree of complete inhibition of affect-expression; unusual devotion and scrupulous fulfillment of obligations to others; not uncommonly—humor and optimism, especially in dangerous and anxiety-producing circumstances. These traits represent defense-mechanism, and their motivating factor is the escape from depression. There were found 2 patterns of this mechanism: (1) A constriction of their sphere of consciousness, resulting from their selective exclusion of everything painful and frustrating from awareness; (2) extreme social activity and altruistic service. English and French summaries.—H. Ormian.

(See also abstracts 5422, 5526, 6255, 6403)

CLINICAL NEUROLOGY

6503. Allen, Kathleen. (Nat. Found. Infantile Paralysis, New York.) The responsibility of the medical social worker to the poliomyelitis patient. *Nerv. Child*, 1956, 11(2), 61-63.—The medical social worker interprets the child's progress and reactions to the family, and interprets the family and its problems to the medical team which is treating the child. Where long hospitalization is indicated, she becomes a balance between the family and the medical group. Where crippling effects are severe, but the child has returned home, she continues her relationship with the family, offering advice, and help, on such financial, emotional, and environmental problems as develop.—G. S. Speer.

6504. Baker, A. B. (U. Minnesota, Minneapolis.) Poliomyelitis XIII—pathology. *Nerv. Child*, 1956, 11(2), 18-24.—A study of 115 fatal cases, and a review of the literature, indicate that poliomyelitis is a widespread illness implicating all parts of the central nervous system except the basal ganglia. The clinical symptomatology is generally directly related to the distribution and severity of the pathologic lesions. 33 references.—G. S. Speer.

6505. Bennett, Robert L. (Georgia Warm Springs Found., Warm Springs.) Functional training of the polio child. *Nerv. Child*, 1956, 11(2), 47-52.—The specific purposes of a functional training program are to develop patterns of movement that are effective, satisfying and safe, and, if necessary, to develop apparatus to support and assist these movements. Four broad aspects of functional training are discussed: types of activities to be taught, dangers of training, apparatus, and assisting the child to make an intel-

ligent adjustment to his residual disability.—G. S. Speer.

6506. Cannon, Robert Charles. A systematic investigation of sensory discriminations in human brain damage. *Dissertation Abstr.*, 1956, 16, 1501.—Abstract.

6507. Denhoff, Eric; Holden, Raymond H., & Silver, Maurice L. Prognostic studies in children with cerebral palsy. *J. Amer. med. Ass.*, 1956, 161, 781-784.—A report of a study of 50 young cerebral palsied children by pneumoencephalograms and psychological examinations to predict each child's progress over a 2-year period. "The most reliable basis for predicting achievements of a child was the intelligence test. The electroencephalogram was not a reliable prognostic tool in this situation but was of value in the diagnosis of seizures when these occurred. Pneumoencephalography, though not recommended for routine use, was of value in some difficult cases. . . ." Conclusions on those children most likely to make adequate adjustment in later life are given.—(Courtesy of *Rehab. Lit.*)

6508. Fairfield, Letitia. Epilepsy; grand mal, petit mal, convulsions. New York: Philosophical Library, 1957. 159 p. \$4.75.—Addressed to the layman, this booklet summarizes established facts about the various forms of epilepsy, its treatment, its management at home, school, industry and the community, and a description of colonies for epileptics and epileptics in relation to the law.—N. H. Pronko.

6509. Fenton, Joseph. Implication for the education of children with cerebral palsy. *Except. Child.*, 1956, 23, 16-20.—The intelligence reports on 430 cerebral palsied children attending special classes in New York state revealed that over 70% of the children were below 90 IQ and about 40% were between 50 to 75 IQ. These findings generally suggest more retardation in this group than is generally recognized. "Children who are mentally retarded require a special developmental curriculum with special methods and techniques" yet "neither teacher training or certifications requirements for teachers of physically handicapped children demand this training."—J. J. Gallagher.

6510. Forster, William, & Tyndel, Milo. (*Hosp. Mental Diseases, Brandon, Manitoba, Can.*) The neuropsychiatric aspects of familial dysautonomia (the Riley-Day Syndrome). *J. ment. Sci.*, 1956, 102, 345-348.—A case of a 6-year old Jewish boy is discussed in the light of anatomical or physiological disturbance in the brain-stem reticular system.—W. L. Wilkins.

6511. Gallese, Arthur J., Jr. (*State Hosp., St. Peter, Minn.*) Spiral aftereffect as a test of organic brain damage. *J. clin. Psychol.*, 1956, 12, 254-258.—Two discs painted with the Archimedes spiral—one evolving clockwise and the other counterclockwise—were presented at one testing in an ABAB order to various groups. There was a direct, extensive inquiry whenever S's original response did not indicate the occurrence of the usual illusion. Using a cutting point determined in a pilot study, it was found that none of the normals (N = 30 attendants) or lobotomized schizophrenics (N = 12), only two of the schizophrenics (N = 41) were classed as organics. The organics as a group performed very differently from

non-organics, but those with alcoholic or convulsive (N = 50) disorders were less well identified than those with other kinds of organic involvement (N = 47. About half CNS syphilitics).—L. B. Heathers.

6512. Garrett, James F. The vocational adjustment of the polio adolescent. *Nerv. Child.*, 1956, 11(2), 64-65.—Two studies are cited, and briefly discussed, to show that the vocational potential of the post-polio adolescent is much more favorable than in many other disability groups.—G. S. Speer.

6513. Glud, Erik, & Blane, Howard T. (*Children's Medical Center, Boston, Mass.*) Body-image changes in patients with respiratory poliomyelitis. *Nerv. Child.*, 1956, 11(2), 25-39.—The authors present a careful review of the literature on body-image, as well as a report of their own observations on body-image changes in respiratory poliomyelitis patients. Psychological reactions and body-image changes in these patients are discussed in detail under these headings: threat of annihilation, effects of mutilation, perception of the environment, respiratory aids and auxiliary equipment, extensibility of the body-image. Implications of body-image concepts for psychotherapy, rehabilitation, and other chronically-disabling illnesses are briefly discussed. 38 references.—G. S. Speer.

6514. Goldsmith, Harry. The contribution of certain personality characteristics of male paraplegics to the degree of improvement in rehabilitation. *Dissertation Abstr.*, 1956, 16, 1504.—Abstract.

6515. Haeussermann, Else. (*Jewish Hosp., Brooklyn, N. Y.*) Estimating developmental potential of pre-school children with brain lesions. *Amer. J. ment. Defic.*, 1956, 61, 170-180.—Children with brain lesions with and without motor handicap are described, as well as "the aim, method, and underlying principle of using a structured interview with parallel objective and subjective evaluation and conclusion." Examples of the approaches and materials employed to study developmental potential in children with brain lesion are given. "The emphasis on an inventory of a child's total functioning and a description of the intactness or non-intactness of the areas of functioning" are stated.—V. M. Staudt.

6516. Hécaen, H., & Piercy, Malcolm. (*Hôpital Ste. Anne, Paris, France.*) Paroxysmal dysphasia and the problem of cerebral dominance. *J. Neurol. Neurosurg. Psychiat.*, 1956, 19, 194-201.—The authors have examined 126 patients with well established unilateral foci of cerebral dysfunction and some kind of epileptic aura. The records of this group are surveyed with respect to (1) presence or absence of dysphasia during the aura; (2) the type of dysphasia; (3) handedness of the patient; (4) side of the epileptic focus. For comparison findings on 12 left-handed patients with unilateral lesions involving the language area and permanent aphasia are presented.—M. L. Simmel.

6517. Hood, O. E. Your child or mine: the brain-injured child and his hope. New York: Harper & Bros., 1957. x, 180 p. \$3.00.—Addressed essentially to the lay reader, this is an anecdotal account of the social, educational, and psychological problems and successes in the operation of the author's training school, devoted particularly to work with children with brain injury.—T. E. Newland.

6518. Kauffmann, Joseph H. Psychological aspects of dentistry for children with cerebral palsy. *J. Dentistry Child.*, 1956, 22, 69-72.—Discusses the psychological implications of cerebral palsy, the necessity for the dentist to recognize and deal with the psychological needs of both the child and his parents, and what the dentist can do, over and above dental treatment, to alleviate the handicaps of cerebral palsy.—(Courtesy of *Rehab. Lit.*)

6519. Kennard, Margaret A. (U. Brit. Columbia, Vancouver, B. C.) Epileptic tendencies of the normal monkey. *Neurology*, 1956, 6, 563-573.—Normal monkeys, although they rarely show clinical epileptic seizures, frequently manifest a form of paroxysmal EEG pattern difficult to distinguish from that of the animal made epileptic by experimental means. The appearance of these normal records is fully described, together with the changes produced by metrazol administration, frontal pole ablation, or the placement of aluminum hydroxide in motor cortical areas.—L. I. O'Kelly.

6520. Kurachi, Yoshi, & Yonemura, Daizo. Critical fusion frequency in retrobulbar neuritis. *A.M.A. Arch. Ophthalmol.*, 1956, 55, 371-379.—A close similarity is pointed out between congenital achromatopsia and retrobulbar neuritis in the behavior of the CFF as well as visual acuity and color vision. It is suggested that the site of the block in the nerve impulses in so-called retrobulbar neuritis may actually be in the neuronal network of the bipolar cell layer and not in the nerve fibers behind the globe as has generally been thought.—S. Renshaw.

6521. Lantz, Beatrice, & Wolf, Ruth. The Columbia Mental Maturity Scale and the Stanford-Binet Test with cerebral palsied children. *Calif. J. educ. Res.*, 1956, 7, 183-185.—On the basis of data obtained on 33 such children (C.A. 3-9 through 13-10), the mean IQ of the CMMS was found to be significantly higher, and to have greater variability, than for the Binet. The teachers and therapists reported "the Stanford-Binet Test provided the most reliable predictive instrument of educational and physical rehabilitation learning level and rate." Caution in the use of the CMMS for such purposes is advised at this time.—T. E. Newland.

6522. McConnell, Adams A. (U. Dublin, Eire.) The cephalic post-traumatic syndrome. Pathological observations. *J. ment. Sci.*, 1956, 102, 330-335.—Headache, dizziness, and mental disturbance following closed head injuries are considered, on the basis of surgical experience, to be compounded of the symptoms of a subdural effusion and the patient's reaction to those symptoms. Preinjury personality is considered largely irrelevant.—W. L. Wilkins.

6523. Pool, J. Lawrence, & Correll, James W. Diagnosis of brain tumor in 25 patients initially treated as psychiatric problems. *J. nerv. ment. Dis.*, 1956, 123, 84-85.—Abstract and discussion.

6524. Robinson, H. A., & Finesinger, J. E. (U. Maryland Sch. Med., Baltimore.) A framework for the psychopathology of poliomyelitis. *Nerv. Child*, 1956, 11(2), 10-17.—"Poliomyelitis as a disease and as an interactive social experience has many elements of uncertainty which create situational stress and anxiety. Reactions of the patient and other persons in the treatment setting must be scrutinized in the

context of this situational anxiety." Implications for goal-setting behavior, for the incorporation of body-image changes, and other adjustment processes are developed. Guilt and various defenses and reactions to guilt are the conspicuous psychopathological phenomena observed in the patients. Professional persons are affected in similar ways, and the behavior is reflected in relationships with the patient, the family, and other professional groups. 22 references.—G. S. Speer.

6525. Robinson, H. A., Finesinger, J. E., & Bierman, J. S. Psychiatric considerations in the adjustment of patients with poliomyelitis. *New Eng. J. Med.*, 1956, 254, 975-980.—Adjustment processes in the total experience of the disease were examined by controlled observations of a group of children with spinal poliomyelitis, all with some degree of lower-extremity involvement. A partial analysis of data indicates that the typical patient and his family present multiple and medically distorted etiologic ideas, so strongly held that they are obstructive factors in treatment and rehabilitation. Parental influence on the adjustment of patients while in the hospital is de-emphasized but after the patient's discharge has a very distinct influence on the course of rehabilitation.—(Courtesy of *Rehab. Lit.*)

6526. Scharmann, Theodor. Der Beitrag der Psychologie zur Rehabilitation körperlich oder psychisch behinderter Personen. (The contribution of psychology toward the rehabilitation of physically or psychologically handicapped persons.) *Psychol. Rdsch.*, 1956, 7, 112-123.—The sundry tasks are discussed which psychologists face in helping handicapped persons adjust to a normal environment. Ability diagnosis, performance evaluation, vocational counselling, job analysis, special tests for the handicapped and psychotherapy may be mentioned as the most important topics in connection with rehabilitation programs.—W. J. Koppitz.

6527. Schrire, L. An ophthalmological survey of a series of cerebral palsy cases. *S. African Med. J.*, 1956, 30, 405-407.—A report of a study of 73 unselected cases of cerebral palsy, to determine the incidence of squint present. Findings and data were considered under the headings of: (1) refraction, (2) muscle balance, and (3) other associated neural or neuromuscular defects. In this series, a larger percentage of squints and other neuromuscular lesions were demonstrated than would be expected in the general population, bearing out the conclusions of previous investigations.—(Courtesy of *Rehab. Lit.*)

6528. Shontz, Franklin C. (Highland View Hosp., Cleveland, O.) Body-concept disturbances of patients with hemiplegia. *J. clin. Psychol.*, 1956, 12, 293-295.—4 groups composed of hemiplegic patients with dominant cerebral lesions, hemiplegic patients with non-dominant cerebral lesions, patients with chronic physical illnesses other than hemiplegia, and normal, healthy individuals were tested for body-concept disturbances. Hemiplegics with dominant cerebral lesions were found to exhibit a significantly higher number of signs of body-concept disturbance.—L. B. Heathers.

6529. Spencer, Helen. A glossary of scientific terms in the field of cerebral palsy. New York: Department of Physical Medicine and Rehabilitation,

College of Physicians and Surgeons, Columbia University, 1956. 26 p.—A general listing of neuro-pathological and orthopedic definitions and descriptions is augmented by a short list of terms used less technically.—T. E. Newland.

6530. Spiegel, E. A., Wycis, H. T., Orchinik, C., & Freed, H. (Temple U. Sch. Med. & Hosp., Philadelphia, Pa.) **Thalamic chronotaxis.** *Amer. J. Psychiat.*, 1956, 113, 97-105.—A series of 30 cases of patients is described in whom circumscribed thalamic lesions produced transitory disturbances of orientation for time and of memory. 68 references.—N. H. Pronko.

6531. Tramer, M. **Nofekh lab'ayot hanevrologiyot v'haripuyot shel ham'holot.** (Notes on neurologic and therapeutic problems of chorea.) *Harefuah*, 1956, 50, 172.—The present state of knowledge concerning the contralateral abdominal proprioceptive reflex permits the minimal conclusion: This reflex, when positive, is a neurological sign of such a high degree of specificity for the choreic syndrome, that very considerable diagnostic significance can be attributed to it. This could be of great benefit in therapy and perhaps even in prevention. The origin of the reflex, its function as a signal of a threat to organism, its localisation and other aspects are discussed. English and French summaries.—H. Ormian.

6532. Van Riper, Hart E. (Nat. Found. Infantile Paralysis, New York.) **The parent of the polio child.** *Nerv. Child*, 1956, 11(2), 40-46.—Parents must be helped to understand and play their appropriate roles as activating agents on the rehabilitation team. Tender loving care, adequate information, sensible attitudes, and proper action on the part of the parents will do much to overcome the handicaps of paralytic poliomyelitis. 24 references.—G. S. Speer.

6533. Walton, Mildred H., & Long, Nicholas. (U. Michigan, Ann Arbor.) **Going to school in a respiratory center.** *Nerv. Child*, 1956, 11(2), 53-60.—Children recovering from polio present a variety of mental health problems that are not usually encountered in the school room, in addition to the more usual problems. The ways in which a teacher can contribute to improved mental health, as well as to education, are discussed in relation to individual planning and activities, small group activities, and total ward activities. 35 references.—G. S. Speer.

6534. Weil, Andre A. (322 Osborn Building, Cleveland 15, Ohio.) **Ictal depression and anxiety in temporal lobe disorders.** *Amer. J. Psychiat.*, 1956, 113, 149-157.—Suddenly occurring and suddenly disappearing emotions (ictal emotions) observed in patients with temporal lobe lesions showed a relationship to "firing" of the temporal lobe cortex as measured in EEG records of the patients concerned and as evidenced by Penfield and his workers during electrical stimulation of the brain. 23 references.—N. H. Pronko.

6535. Weinstein, Edwin A., & Kahn, Robert L. (Walter Reed Army Inst. Res., Washington, D. C.) **Patterns of social interaction in brain disease.** *Amer. J. Psychiat.*, 1956, 113, 138-142.—The authors point out that the behavior of patients following brain injury cannot be regarded as an attribute of physiologically or perceptually measurable deficits but as related to the premorbid personality of the patient

living in a society where health and illness have certain moral and ethical values.—N. H. Pronko.

6536. Werner, Heinz, & Weir, Alastair. **The figure-ground syndrome in the brain-injured child.** *Int. Rec. Med.*, 1956, 169, 362-367.—A report of investigations of figure-background impairment in brain-injured children and its relation in 3 areas of functioning—perception, memorization, and conceptual thinking. "The above series of studies leads clearly to the conclusion that brain-injured children are much more liable to interference from background stimuli than are endogenous or normal children. In contrast to the performance of endogenous defectives as well as that of normals of the same mental age, brain-injured children show a partial breakdown or leveling of the normally sharp distinction between figure and ground processes. . . ."—(Courtesy of *Rehab. Lit.*)

6537. Wortis, Joseph. (Jewish Hosp., Brooklyn, N. Y.) **A note on the concept of the "brain-injured child."** *Amer. J. ment. Defic.*, 1956, 61, 204-206.—According to the author, "There is . . . no 'brain-injured child,' but only a variety of brain-injured children whose problems are quite varied and whose condition calls for far more refined analysis than some of the current generalizations on the brain-injured child provide."—V. M. Staudt.

6538. Zimmerman, Frederic T. (Columbia U., New York.) **N-methyl-a, a-methyl-phenylsuccinimide in psychomotor epilepsy therapy.** *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 65-71.—The chemistry, dosages, side-effects, and efficiency of this new drug in the management of psychomotor epilepsy are set forth. 74% of 35 patients so treated "showed a reduction in seizures."—L. A. Pennington.

(See also abstracts 5497, 5658, 5832, 6098, 6163, 6240, 6254, 6255, 6267, 6353, 6355, 6387, 6552)

PHYSICALLY HANDICAPPED

6539. Butler, Robert A., & Albrite, Major James P. **The pitch-discrimination function of the pathological ear.** *Arch. Otolaryng.*, Chicago, 1956, 63, 411-418.—25 perceptive deafened patients and 17 conductive deafened patients were studied for pitch difference limens at 500, 1000, 2000, 3000, and 4000 cps. "The performance of the perceptively deafened group was significantly inferior to that of the conductive group at 3000 and 4000 cps. Extensive training served to reduce the magnitude and group variability of the difference limens, but significant differences between groups remained. These data were interpreted in accordance with a modified 'place' theory of hearing."—J. C. G. Loring.

6540. Collins, Charles W. **Attitude toward a handicap; a case study.** *J. Nat. Med. Ass.*, 1956, 48, 174-179; 202.—The case history of a 40-year old man born with a congenital defect, a withered right arm; in it are revealed his hostilities and anxieties, his rejection by the non-handicapped, and parental and family attitudes which caused his lack of adjustment to his handicap. Psychotherapy has succeeded in effecting his adjustment, but the writer believes that a patient with such a history may need periodic therapy during his life time.—(Courtesy of *Rehab. Lit.*)

6541. Freud, Esti D. **Speech and voice training of the deaf.** *Arch. Otolaryng.*, Chicago, 1956, 63, 183-195.—A historical survey of training and educating the deaf and hard of hearing. A description is given of the vocal stimulator designed by Robert Nielsen, "an apparatus which when brought into contact with a normal healthy larynx picks up vibrations of the vocal cords during phonations and transmits them amplified to the larynx of the deaf."—J. C. G. Loring.

6542. Harris, J. Donald; Haines, Henry L., & Myers, Cecil K. **A new formula for using the audiogram to predict speech hearing loss.** *Arch. Otolaryng.*, Chicago, 1956, 63, 158-176.—After a discussion of previous methods of evaluating speech hearing loss, a new system based on the statistic of multiple regression equation is proposed. 197 deafened ears, a wide variety of diagnoses, subjects ages 18 to 58 inclusive, and pure tones were used. Speech used in the tests was the W-22 recorded list CID. The results "for 64 especially distorted audiograms the multiple regression prediction equation predicted speech scores somewhat better than any other but that for other audiograms the Three-Average system was superior. Most stable system for predicting speech hearing loss was an average of the multiple regression equation prediction and the Three-Average prediction."—J. C. G. Loring.

6543. Heller, Morris F., & Lindenberg, Paul. **Sudden perceptive deafness: report of five cases.** *Ann. Otol., etc.*, St. Louis, 1955, 64, 931-940.—Four patients had bilateral apparently irreversible deafness, and one patient had monaural deafness who recovered spontaneously. No etiological factor was identified in these cases.—J. C. G. Loring.

6544. Hiskey, Marshall S. (U. Nebraska, Lincoln.) **A study of the intelligence of deaf and hearing children.** *Amer. Ann. Deaf*, 1956, 101, 329-339.—The Nebraska Test of Learning Aptitude, administered orally to 380 hearing children aged 5 to 10 years inclusive, yielded mean IQ's for each age level within two points of mean Binet IQ's on the same population. Comparative half-year scores for each part of the test for the deaf and non-deaf are presented. A comparison of the performances of the two groups suggests "that the average quotient for the deaf would be in the mid-90's when norms for the hearing are used." Possible contributing factors are indicated.—T. E. Newland.

6545. Jokl, Ernst; Kessler, Henry H., & Straus, Erwin W. **Neuromuscular performance and sensory receptivity in a triple congenital amputee; report of a case.** *J. Amer. med. Ass.*, 1956, 161, 439-440.—A case report of a 22-year-old man, born without lower arms and hands and without the distal end of the right leg, supports Adrian's observations that "the nervous system reacts to relations between stimuli and performs the appropriate task with any part of the motor system that is available. . . ." The young man's high level of physical efficiency presupposed the presence of a functionally efficient autonomic system. His unusually good adjustment, high motivation and intelligence are responsible for his physical attainments. He is now a practicing attorney.—(Courtesy of *Rehab. Lit.*)

6546. Jooste, H. S. **The rehabilitation of the deaf.** *S. African Med. J.*, 1956, 30, 450-453.—Dis-

cusses the incidence of deafness in South Africa, the psychological problems encountered in treating deaf persons, other aspects of treatment, and rehabilitation services available in South Africa.—(Courtesy of *Rehab. Lit.*)

6547. Kaufman, M. Charles. **The personal-social, educational and vocational adjustment of blinded veterans of World War II.** *Dissertation Abstr.*, 1956, 16, 1400-1401.—Abstract.

6548. MacPherson, Helen. **Counseling in a hearing conservation program.** *Except. Child*, 1956, 23, 21-22; 36: 38.—A description of how social work methods supplement and enhance the programs for the hearing handicapped children in Providence. Counseling services can operate to give direct case work service to a pupil, be an interpretative service to parents, provide means of developing and using diagnostic resources, operate as a special referral service, and provide many other services.—J. J. Gallagher.

6549. Motto, R. L. **Emotional factors in physically handicapped children.** *Calif. Med.*, 1956, 84, 106-109.—A brief report calling attention to some important emotional factors observed by the staff of the Reiss-Davis Clinic for Child Guidance, Los Angeles, in its work with physically handicapped children and their parents. Children seen in diagnostic consultation represented a wide variety of physical handicaps, congenital and caused by disease, as well as some questionable cases of mental retardation. Presenting complaints included learning problems, behavior disorders, phobias, severe separation anxieties, enuresis, passive withdrawn states, and immaturity reactions. Parental attitudes toward handicapped children are discussed briefly. Individual and group psychotherapy was found useful in working with these parents.—(Courtesy of *Rehab. Lit.*)

6550. Norris, Miriam. (U. Chicago, Ill.) **What affects blind children's development.** *Children*, 1956, 3, 123-129.—The author describes the Chicago project focused on children blinded by retrolental fibroplasia. The conclusions point to a moral equally applicable to those who work with children sightless from other causes. The author analyzes (1) general principles underlying the study; (2) objectives of the study; (3) method of the study; (4) findings of the study; (5) summary of results; (6) expectations and experience; and (7) counseling service.—S. M. Amatoria.

6551. Sank, Diane, & Kallmann, Franz J. **Genetic and eugenic aspects of early total deafness.** *Eugen. Quart.*, 1956, 3, 69-74.—Questions as to the possibility of the deaf producing non-hearing children invariably arise. Deaf-mutism occurs only if deafness precedes the normal establishment of speech. Early total deafness may be due to gene mutations and gene variations, sometimes representing parallelism of action of various independent genes. Hereditary deafness needs much more study. The severe emotional problems of the deaf could be relieved in some degree by measures and education which would integrate, rather than isolate, the deaf into society.—G. C. Schwesinger.

6552. Schuknecht, Harold F., & Davison, Roderrick C. **Deafness and vertigo from head injury.** *Arch. Otolaryng.*, Chicago, 1956, 63, 513-528.—A

study of correlating clinical findings in human patients with head injury and animal experiments. Deafness and vertigo due for the most part to injury of the membranous labyrinth. Permanent partial deafness occurs in about 50% of the patients who had a blow to the head severe enough to cause unconsciousness. The clinical manifestations of damage to the ear are described with respect to the type of injury.—*J. C. G. Loring.*

(See also abstracts 6075, 6178, 6229, 6255, 6634, 6638, 6639, 6644)

EDUCATIONAL PSYCHOLOGY

6553. D'Evelyn, Katherine E. **Meeting children's emotional needs.** Englewood Cliffs, N. J.: Prentice Hall, Inc. 1957. x, 176 p. \$3.75.—The emotional needs of children are discussed with emphasis on developmental differences, specialized needs of individual children with learning disabilities, stuttering, school phobia, aggressive behavior, withdrawing behavior, truancy and how the teacher works with parents and the school psychologist. "Meeting the emotional needs of children does not imply that the teacher carries out therapy and is therefore a therapist. If the teacher maintains an atmosphere conducive to good mental health, however, the classroom can have a therapeutic effect on the child."—*E. M. Bower.*

6554. Frandsen, Arden N. **How children learn; an educational psychology.** New York: McGraw-Hill, 1957. xiv, 546 p. \$5.50.—Designed as a textbook for undergraduate and graduate students, this is an educational psychology which applies its principles specifically to the understanding and teaching of elementary school children. The 14 chapters are organized around the major functions of teaching which are identified as: (1) acquiring a concept of the aims of elementary education; (2) determining the kinds of learning experiences essential to those objectives (1 chap.); (3) defining learning and providing the conditions for effective learning (10 chaps.); (4) handling individual differences (2 chaps.); (5) evaluating progress toward the desired goals (1 chap.). Illustrations, chapter reviews and applications, chapter references, glossary.—*R. C. Strassburger.*

6555. Goodman, Samuel M., Diamond, Lorraine K., & Fox, David J. **Who are the Puerto Rican pupils in the New York City public schools?** New York: Board of Education, City of New York, 1956. xiv, 88 p.—In the first socio-educational survey, a total of 6,199 pupils—2,748 in Grades 4 through 6 of four elementary schools and 3,721 in Grades 7 through 9 of three junior high schools—was surveyed. The second socio-educational survey included 3,633 pupils—874 in Grade 4 of four elementary schools and 2,759 in Grades 7 through 9 of two junior high schools. The testing program included non-verbal tests of intelligence and tests of ability to understand spoken English, to read English, and to perform basic arithmetic computations. Survey findings reveal data pertaining to familial and educational backgrounds of Puerto Rican pupils in New York City schools. Results of the testing program offer information regarding their ability to understand spoken English,

ability to read English, ability to do arithmetical computations, and intellectual ability.—*E. Sánchez-Hidalgo.*

6556. Gronlund, Norman E. (*U. Illinois, Urbana.*) **Generality of teacher's sociometric perceptions: relative judgment accuracy on several sociometric criteria.** *J. educ. Psychol.*, 1956, 47, 25-31.—To what extent is sociometric perception a general ability? An initial step toward answering this question is made by investigating the extent to which teachers' accuracy in judging sociometric status of 6th grade children is related to actual sociometric data obtained from these children. The author concludes that the accuracy of these teachers' sociometric perceptions had generality over these sociometric criteria: seating companion, play companion, and work companion.—*F. Costin.*

6557. Lantz, Beatrice. (*Los Angeles County Sch., Calif.*) **Children's learning, personality and physiological interactions: a progress report.** *Calif. J. educ. Res.*, 1956, 7, 153-158.—"The possibility that the capable non-achiever is primarily emotionally disturbed is challenged by the hypothesis that he may fundamentally be responding to irritabilities created by minor but cumulative cardiac or respiratory malfunctionings, by low maturation level and rate, by glandular imbalance or persistent low nutrition." Relevant physiological, psychological, educational, and sociological data were collected during the first half of 1955 on 336 boys and 336 girls in the third grades of 6 school districts of Los Angeles County, and are now being analyzed.—*T. E. Newland.*

6558. Layman, Emma McCloy. (*Children's Hosp., Washington, D. C.*) **Mental health through physical education and recreation.** Minneapolis: Burgess Publishing Company, 1955. ix, 520 p. \$4.00.—The author is both a clinical psychologist and a teacher of physical education. As such she has brought her experience in both fields into use in this textbook. It provides an underlying matrix of psychological orientation for physical education and a better understanding of physical education for those psychologists working in educational or recreational programs. The use of the physical education or recreational group as a means of securing improved mental health is dealt with comprehensively as well as that of the counseling and group therapeutic role of the physical education teacher.—*M. A. Seidenfeld.*

6559. Malinovsky, Levy. **Hahistaglut l'vet ha-sefer hatikhon.** (Adjustment to the secondary school.) *Hahinukh*, 1955/56, 28, 358-367.—In order to search the question, to which extent primary school leavers adjust themselves to the demands of the secondary school, a follow-up study was organized in Tel Aviv. The secondary school career of 800 leavers (46% boys, 54% girls) of the 8th primary school grade in 1948 was searched after 5 years. The first difficulty of normal adjustment lies in lack of a clear definition of the aims of secondary education. Thus, the secondary academic school in Tel Aviv absorbs 50% of elementary school graduates, but scarcely a half of them end their secondary studies. The main cause of dropping out is failure in learning, caused by non-sufficient aptitudes. Educational and psychological counseling is needed, in order to avoid

failures in entering a secondary school and during the secondary learning period.—*H. Ormian.*

6560. Mercer, Blaine E., & Carr, Edwin R. (Eds.) *Education and the social order*. New York: Rinehart, 1957. xv, 585 p. \$6.00.—A 3-part volume of readings emphasizing the cross-disciplinary approach of social aspects to education. Part I, Culture, Society, and Education, contains 25 selected readings on culture, education and socialization, education, and social stratification, social control and disorganization, and the social change of education. Part II, The school in American society, contains 55 readings covering such topics as the school as a social institution, class and ethnic patterns, formal and informal organization of school systems, the teacher, the community, moral and spiritual values, the school and democracy, and expectations and realities of the school. Part III briefly summarizes the goals and purposes of the sociology of education.—*C. K. Bishop.*

6561. Millard, Cecil V., & Rothney, John W. M. *The elementary school child; a book of cases*. New York: The Dryden Press, 1957. xii, 660 p. \$4.90.—The authors present a case method approach to the study of children by teachers. A chapter on the concept of individuality and a chapter on organization of case histories precede 22 actual case presentations. 2 criteria are emphasized in the analyses of the cases: the need for intensive and detailed data about the child as a basis for understanding the individual and the use of the inductive method as a process in understanding.—*E. M. Bower.*

6562. Myers, George Raymond. *A study of factors and practices related to holding power in certain Michigan secondary schools*. *Dissertation Abstr.*, 1956, 16, 1414-1415.—Abstract.

6563. Robinson, John Taylor. *Social relationships of an elementary classroom group covering two school years*. *Dissertation Abstr.*, 1956, 16, 1234-1235.—Abstract.

6564. Shneerson, F. *Psikhologia pedagogit ivrit*. (Hebrew educational psychology. Studies in intimate psychology.) Tel Aviv: Massada Ltd., 1956. 270 p.—The 2nd edition (see 27: 2185) is enlarged by an additional chapter: The educational and spontaneous basis in the development of Judaism—the method of mental genealogy. Mental genealogy means comparative studies of mental life in a given family during 3-4 generations.—*H. Ormian.*

6565. Stainbrook, Edward, & Wexler, Murray. *The place of the behavioral sciences in the medical school*. *Psychiatry*, 1956, 19, 263-269.—Although teaching of the behavioral sciences during the clinical years of medical education has received attention recently, the possibility of their formal inclusion within medical schools has been little considered. The potentialities of a department separate from psychiatry are explored with reference to present usage and projected plans in the Upstate Medical Center of the State University of New York.—*C. T. Bever.*

6566. Stensaasen, Svein. *Innsikt og innføring som faktorer i den pedagogiske situasjon*. (Insight and empathy as factors in the teaching situation.) *Norsk ped. Tidsskr.*, 1956, 40, 225-237.

6567. Zohar, Zvi. *T'rumato shel Freud l'torat hahinukh*. (Freud's contribution to education.)

Ofakim, 1956, 10, 134-142.—"Freud himself did not seem to appreciate his own contribution to education . . . , but this was rooted in his modesty which darkened the truth." His concept of unconsciousness and its content, as well as his emphasis on the importance of childhood and the child's sexuality, changed the modern education, and became basis of educational optimism. "Freud's contributions to the psychology of education opened the ways to firm foundations of the educational theory."—*H. Ormian.*

(See also abstract 6558)

SCHOOL LEARNING

6568. Altus, Grace T. (Santa Barbara County Schs, Calif.) *A WISC profile for retarded readers*. *J. consult. Psychol.*, 1956, 20, 155-156.—Twenty-five elementary school children were diagnosed as having "a severe reading disability" which was defined as "a discrepancy of two years or more between a given child's expected reading level as derived from his Full Scale WISC IQ and his actual reading level as measured by a standardized reading test."—*A. J. Bachrach.*

6569. Bannon, Charles Joseph. *An evaluation of physics and chemistry instruction in Connecticut public secondary schools*. *Dissertation Abstr.*, 1956, 16, 1635.—Abstract.

6570. Bentley, Ralph R. (Purdue U., Lafayette, Ind.) *Experimental studies of the use of audio-visual aids in vocational agriculture*. *J. exp. Educ.*, 1956, 24, 211-220.—The study was designed to evaluate the effectiveness of certain audio-visual aids when they were used as part of the regular classroom instructions of vocational agriculture students who were studying soil conservation. 11 different schools in which 236 students participated were included. It was reported that the experimental or audio-visual aid group was not significantly superior to the control group in achievement as measured by the soil conservation post-tests when the reference material was similar to the audio-visual aids. Audio-visual aids were found to be effective when they included new material not available through the reference material.—*E. F. Gardner.*

6571. Beschel, Gertrud. *Kritzelschrift und Schulleife*. (Scribbling and maturity for school.) *Psychol. Rdsch.*, 1956, 7, 31-44.—Only a careful graphological analysis of the scribbles of first graders allows statements about their maturity level.—*W. J. Koppitz.*

6572. Betts, Emmett Albert. *Research on reading as a thinking process*. *J. educ. Res.*, 1956, 50, 1-15.—Finds of 3 doctoral dissertations are reported. They deal with the relationship between general reading comprehension and reading comprehension in specific subject matter, literal and critical reading in science, and literal and critical reading in social studies. 28 references.—*M. Murphy.*

6573. Burton, William H., Baker, Clara Belle, & Kemp, Grace K. *Reading in child development*. Indianapolis: Bobbs-Merrill, 1956. xvi, 608 p. \$7.47.—A college text on reading. Sections of the book are entitled "The nature of reading," "Developing the ability to read printed words" and "Adaptation to group needs and individual differences." The im-

portance of reading for meaning is emphasized. Discussion of vision education and one on "aural reading" is included. Reading is shown as related to child development and experience rather than as an isolated skill. Methodologies, diagnostic and evaluative techniques are discussed.—*L. S. Baker.*

6574. Buxton, Claude E. (Yale Univ.) *College teaching; a psychologist's view.* New York: Harcourt, Brace, 1956. viii, 404 p. \$4.95.—Conceived as a practical guide for the active college teacher, this book also is aimed toward the student who plans on teaching in a college or university. Among the topics developed in the 14 chapters are: problems of higher education (with a special chapter on psychology in the curriculum); planning introductory courses, lecturing, discussion methods, group-centered teaching and case study methods, constructing and grading course examinations, classroom morale, advising and counseling, and getting to know students. Appendix on experimental psychology. 295 references.—*F. Costin.*

6575. Carter, Homer L. J., & McGinnis, Dorothy J. (Western Michigan U., Kalamazoo.) *Effective reading, for college students.* New York: Dryden Press, 1957. x, 354 p. \$3.60.—This textbook is designed for college students whose reading skills are below expected proficiency. The various phases of effective reading are discussed; guided activities are provided. Vocabulary building, study habits, speaking and writing are also included in this discussion. Bibliography is interspersed with text material. A bibliographical reference list to great books, reading equipment items and manufacturers, and a glossary of reading terms form the appendices.—*P. D. Leedy.*

6576. Chess, Edith Grossman. *The manner in which two samples of ninth-grade general science students analyze a number of selected problems.* *Dissertation Abstr.*, 1956, 16, 1398-1399.—Abstract.

6577. Davis, Charles Edward. *The association of subject preference with accomplishment in selected scholastic areas of eighth grade pupils.* *Dissertation Abstr.*, 1956, 16, 1225-1226.—Abstract.

6578. Eldridge, Henry Madison. *A study of the variation in accomplishment and subject preference in different secondary schools.* *Dissertation Abstr.*, 1956, 16, 1226-1227.—Abstract.

6579. Fink, August Armandus. *The effects of tachistoscopic training in digit perception on eye movements in reading.* *Dissertation Abstr.*, 1956, 16, 1289.—Abstract.

6580. French, Lillian A. *A study of the progress made by twenty-four retarded readers in an improvement program.* *Dissertation Abstr.*, 1956, 16, 1413.—Abstract.

6581. Fullerton, Billie J. *The comparative effect of color and black and white guidance films employed with and without "anticipatory" remarks upon acquisition and retention of factual information.* *Dissertation Abstr.*, 1956, 16, 1413-1414.—Abstract.

6582. Gray, Lillian, & Reese, Dora. *Teaching children to read.* (2nd ed.) New York: Ronald Press, 1957. ix, 475 p. \$5.50.—As a text for courses in methods of teaching reading, this work covers both the elementary and secondary school levels. Emphasis is placed upon the function of read-

ing in promoting personal adjustment, a theme which is developed principally in Part I of the text. Part II analyzes the concept of reading readiness, and discusses methods of developing such readiness. Part III outlines the basic developmental reading program from the first grade through the secondary school. Illustrative lesson plans are offered. Part IV treats of additional aspects of the reading program, such as remedial procedures, content reading problems, recreational reading, and appraising reading growth. Illustrations, chapter questions and activities, selected references. (See 24: 741.)—*R. C. Strassburger.*

6583. Hennessey, John William, Jr. *A study of some aspects of teaching and learning in a college case-method course in human relations in business.* *Dissertation Abstr.*, 1956, 16, 1642.—Abstract.

6584. Kasper, Abigail Ash. *A study of the relationships among classroom climate, emotional adjustment, and reading achievement.* *Dissertation Abstr.*, 1956, 16, 1399-1400.—Abstract.

6585. Lahti, Arnold M. *The inductive-deductive method and the physical science laboratory.* *J. exp. Educ.*, 1956, 24, 149-163.—An experiment to ascertain the effectiveness of the laboratory in developing the students' ability to use the scientific method was conducted in a natural science class enrolling 338 students, 86% of which were either freshmen or sophomores. 4 methods of teaching were compared: the inductive-deductive, historical, theme and standard method. "The individualized inductive-deductive laboratory appears to offer a means of developing the students' ability to use the scientific method. . . ." 26 references.—*E. F. Gardner.*

6586. Lehr, Milton W. *A statistical description of factors related to drop-outs and non-drop-outs at Northwestern State College.* *Dissertation Abstr.*, 1956, 16, 1386.—Abstract.

6587. Lockman, Robert F. *A note on measuring "understandability."* *J. appl. Psychol.*, 1956, 40, 195-196.—A measure of understandability is proposed as a supplement to reading ease measures such as the Flesch. In one application 9 sets of standard psychological test directions, for which Reading Ease scores were computed, were rated by groups of Navy Aviation Cadets. It would appear that RE scores and understandability ratings were not measuring the same thing.—*P. Ash.*

6588. Lowenfeld, Viktor. *Creative and mental growth.* (3rd ed.) New York: Macmillan, 1957. xxii, 541 p. \$5.90.—Fourteen chapters in this volume (see 27: 645) cover the following topics: meaning of art in education; meaning of creative activity in elementary education; first stages of self-expression; first representational attempts; achievement of a form concept; dawning realism; pseudorealistic stage; period of decision; adolescent art; meaning of aesthetic criteria; case of the gifted child; therapeutic aspects of art education; summary of all stages, and lastly a chapter of references.—*V. M. Staudt.*

6589. McClendon, Paul Irving. *An experimental study of the relationship between the note-taking practices and listening comprehension of college freshmen during expository lectures.* *Dissertation Abstr.*, 1956, 16, 1736-1737.

6590. McDonald, Arthur Smith. *An experimental study of the influence of a college reading*

program on academic performance. *Dissertation Abstr.*, 1956, 16, 1402.—Abstract.

6591. Meddleton, Ivor G. (U. Queensland, Australia.) An experimental investigation into the systematic teaching of number combinations in arithmetic. *Brit. J. educ. Psychol.*, 1956, 26, 117-127.—Systematic practice in scientifically compiled and graded number combinations produced greater growth in arithmetic ability in a group of junior school children than did the use of practice examples selected at random. Greater improvement appeared in subtraction and division than in addition and multiplication. The superiority of the experimental group over the control group was sustained and even increased over the vacation period. The use of systematically organized material was somewhat more beneficial to classes representing poorer socio-economic areas.—R. C. Strassburger.

6592. Mennes, Arthur H. (Publ. Schs, Madison, Wis.) The effectiveness of multiple period curricular practices in high school English and social studies. *J. educ. Res.*, 1956, 50, 59-69.—Experimental and control groups of high school sophomores were employed to compare multiple period instruction integrating English and world history with conventional instruction in separate periods. Of 29 comparisons made between experimental and control groups, 19 favored the experimental group.—M. Murphy.

6593. Morgan, Carl E. Criteria for diagnosis and prediction in a remedial reading program. *Dissertation Abstr.*, 1956, 16, 1507-1508.—Abstract.

6594. Moses, Virginia Musick. (Syracuse U., N. Y.) A study of learning derived from a functional course in marriage and family relationships. *Marriage Fam. Living*, 1956, 18, 204-208.—An effort to determine whether or not "these courses are making a positive contribution towards meeting the needs of young people today . . . within the limits of . . . this study it seems justifiable to conclude that college students enrolled" do make "significant gains."—M. M. Gillet.

6595. Penoi, Charles Roderick. Some factors of academic achievement in high school pupils attending selected Indian boarding schools in Oklahoma. *Dissertation Abstr.*, 1956, 16, 1389.—Abstract.

6596. Pincus, Morris. An investigation into the effectiveness of two methods of instruction in addition and subtraction facts. *Dissertation Abstr.*, 1956, 16, 1415.—Abstract.

6597. Shafer, Dwight Thomas. Analysis of certain factors in the high school preparation of Iowa high school graduates entering selected Iowa colleges. *Dissertation Abstr.*, 1956, 16, 1620.—Abstract.

6598. Shepler, Warren Davis. A study of scholastic achievement in secondary school science in relation to pupils' relative preference for this subject. *Dissertation Abstr.*, 1956, 16, 1376-1377.—Abstract.

6599. Simendinger, Elizabeth Anne. The ability to identify and evaluate assumptions in eighth-grade general science: a comparison of the effectiveness of two teaching methods on the development of the ability to identify and evaluate as-

sumptions. *Dissertation Abstr.*, 1956, 16, 1417.—Abstract.

6600. Smith, Donald E. P., Wood, Roger L., Downer, James W., & Raygor, Alton L. (U. Michigan, Ann Arbor.) Reading improvement as a function of student personality and teaching method. *J. educ. Psychol.*, 1956, 47, 47-58.—". . . college students were exposed to two methods of teaching (remedial reading): directive, structured; and non-directive, unstructured. Students characterized as permeable and anxious made optimum progress with directive methods. Those described as impermeable and anxious were, apparently, uninfluenced by the teaching method as inferred from gain in efficiency." Implications of these findings for theoretical problems of teaching and counseling were pointed out.—F. Costin.

6601. Staudohar, Frank T., & Smith, Robert G., Jr. (AF Personnel and Training Research Center, Lackland AFB, Tex.) The contribution of lecture supplements to the effectiveness of an attitudinal film. *J. appl. Psychol.*, 1956, 40, 109-111.—To evaluate the effect on expressed attitudes toward discipline of lecture supplements to a film, 3 comparable lectures designed to point out significant film sequences were developed, for use before the film, after the film, or part before and part after the film. Mean scores on an attitude scale for 3 film groups were compared with the mean score of a film-only control group. There were no significant differences attributable to lecture placement among the 3 film groups, but the film-plus-lecture groups were generally more favorable in attitude toward military discipline than the film-only group.—P. Ash.

6602. Stephens, J. M. (Johns Hopkins U., Baltimore, Md.) Nondeliberative factors in teaching. *J. educ. Psychol.*, 1956, 47, 11-24.—Evidence is presented to support the proposition that certain "spontaneous tendencies" provide in a large measure those tools by which basic mechanisms of learning are engaged. This is true both of informal education at home and formal education at school. These automatic tendencies within the teacher and the learner are shown to be important in bringing about motivation, practice, reinforcement, guidance, and the enhancement of insight. 27 references.—F. Costin.

6603. Trankell, Arne. (U. Gothenburg, Sweden.) The influence of the choice of writing hand on the handwriting. *Brit. J. educ. Psychol.*, 1956, 26, 94-103.—Writing proficiency in terms of quality and speed in a group of 637 children classified as left-handed at the beginning of elementary school was assessed after 4 years of school work. With intelligence and sex held constant, there was evidence of a relationship between quality of handwriting and consistency of use of either the left or right hand. No significant bearing of writing habits upon speed of handwriting was found. Consistent left-hand writers achieved generally as good handwriting as a matched group of right-handers.—R. C. Strassburger.

6604. Van Dalsem, Elizabeth Lou. Factors related to low achievement in high school English. *Dissertation Abstr.*, 1956, 16, 1233-1234.—Abstract.

6605. Vernon, M. D. (U. Reading, Eng.) The improvement of reading. *Brit. J. educ. Psychol.*, 1956, 26, 85-93.—Problems of reading relating to the

understanding and remembering of connected prose are discussed. After noting the different kinds of reading and the variety of mental processes involved, methods for promoting efficiency are proposed. Stress is placed upon the necessity of varying the approach and method according to the purpose in reading. Although the active purpose of the reader is essential to clear understanding and accurate remembering, coherence and logical continuity of the material itself is a contributing factor. 21 references.—R. C. Strassburger.

6606. Wallihan, Robert Sylvanus. A comparative study of retardation in the primary grades of the San Diego, California, city schools. *Dissertation Abstr.*, 1956, 16, 1418.—Abstract.

6607. Ward, John N. (Michigan State U., East Lansing.) Group-study versus lecture-demonstration method in physical science instruction for general education college students. *J. exp. Educ.*, 1956, 24, 197-210.—It was reported that the group method resulted in longer retained more-understanding type of learning and also greater expression of individual differences of learning on the part of the superior students. The lecture-demonstration method resulted in greater expression of individual differences and longer retained more-understanding type of learning on the part of the least capable students. The lecture-demonstration methods resulted in greater expression of individual differences in longer retained recall-recognition type of learning for the lower three quarters of the students, while both methods were essentially equally effective for the most capable students.—E. F. Gardner.

6608. Webb, Wilse B., & Wallon, Edward J. Comprehension by reading versus hearing. *J. appl. Psychol.*, 1956, 40, 237-240.—8 comparable groups of subjects were each exposed to 3 mythological stories, in one of the following conditions: by audition (tape recording); by reading through once; by read-studying, for the time taken for the auditory presentation; by audition concurrent with reading. True-false post-tests were administered after the material was presented. A single read-through was as effective as auditory presentation; both were slightly inferior to read-study or reading accompanied by the auditory presentation.—P. Ash.

6609. Westover, Frederick L., & Anderson, William F. (U. Alabama, University.) A reading improvement course at the University of Alabama. *Sch. & Soc.*, 1956, 83, 152-153.—A six week non-credit course in reading improvement with emphasis on reading for meaning and understanding was developed. Reading films and reading selections are used. In six weeks of 12 to 15 practice periods, classes showed a mean gain in rate of reading of 48%. Gains in comprehension were slight with some showing loss.—E. M. Bower.

6610. Willems, Edgar. Les bases psychologiques de l'éducation musicale. (Psychological bases of musical education.) Paris: Presses Universitaires de France, 1956. vii, 142 p. 500 Fr.—The objectives of this work are limited to musical education in schools and to individual instruction, excluding the influence of the teacher, of family and social environment. 20 chapters include: rhythm, sound, the musical ear, auditory sensitivity and affectivity, melody, relative

and absolute inner audition, auditory intelligence, harmony, memory, associations, instrumental technique and interpretation, musical creativity, therapeutic effects of music, principles of analogical psychology.—G. Rubin-Rabson.

6611. Willey, D. S., & Thomson, C. W. Effective reading and grade-point improvement with college freshmen. *Sch. & Soc.*, 1956, 83, 134-135.—Approximately 100 freshmen were separated into two groups, one given a course in remedial reading. The remedial group showed about twice as much improvement in reading as measured by changes on the Iowa Silent Reading Test as the control. The latter group scored significantly lower in grade-point average.—E. M. Bower.

6612. Zerfoss, Lester F. (American Enka Corp., Enka, N. C.) Are you reading on the run? *Advanced Mgmt.*, 1956, 21(8), 9-12.—It's not how fast we read, nor how much, but rather how well we utilize what we read that really counts. A note taking system can insure real value from reading. Discusses need to put to work 6 principles of effective reading, and 6 reading skills which can be learned.—A. A. Canfield.

(See also abstracts 6107, 6347)

INTERESTS, ATTITUDES & HABITS

6613. Angelino, Henry & Mech, Edmund V. (U. Okla., Norman.) Some "first" sources of sex information as reported by ninety college students. *Proc. Okla. Acad. Sci.*, 1954, 35, 117.—Abstract.

6614. Boldt, Albert Walter. The honorary leadership fraternity in American society: A survey analysis of Florida Blue Key members and non-members. *Dissertation Abstr.*, 1956, 16, 1613-1614.—Abstract.

6615. Broderick, Carlfred Bartholomew. Predicting friendship behavior: A study of the determinants of friendship selection and maintenance in a college population. *Dissertation Abstr.*, 1956, 16, 1732.—Abstract.

6616. Campbell, Anna Lucile. A study of some factors in the written language of a group of Texas land-grant college freshmen to show how the nature of the language reflects the socio-economic backgrounds of these students. *Dissertation Abstr.*, 1956, 16, 1445.—Abstract.

6617. Einhorn, Carl Murray. The differences in social beliefs held by selected education and non-education seniors at the University of Michigan. Fall, 1952. *Dissertation Abstr.*, 1956, 16, 1412-1413.—Abstract.

6618. Ewens, Wm. Price. The development and standardization of a preliminary form of an activity experience inventory: a measure of manifest interest. *J. appl. Psychol.*, 1956, 40, 169-174.—The development of the Activity Experience Inventory, a measure of manifest interest (interest expressed by actual participation in relevant activity) is described. The items were scored using the interest areas of the Kuder Preference Record, Form BB. Validity coefficients (against an Experience Data Blank) varied from .27 to .82, median .39. Experience patterns for boys and girls differed in the expected directions. Reliability coefficients are reported. Tentative norms,

separate for males and females, were developed for 398 male and 438 female high school students.—P. Ash.

6619. Henderson, Joseph R. (*Union Coll., Barboursville, Ky.*) **The effect of one year's attendance at college upon attitudes toward family living of students of different social classes.** *Marriage Fam. Living*, 1956, 18, 209-212.—"This study is based on the hypothesis that social class is only one of the factors which influence attitudes. . . . Changing from one social class to another involves a change in attitudes and convictions as well as in patterns of behavior."—M. M. Gillet.

6620. Johnson, Bernadine. **Family relations and social adjustment scores on the Minnesota Personality Scale as related to home and school backgrounds of a selected group of freshman women.** *Dissertation Abstr.*, 1956, 16, 1438-1439.—Abstract.

6621. Katz, Daniel; Sarnoff, Irving, & McClintock, Charles. **Ego-defense and attitude change.** *Hum. Relat.*, 1956, 9, 27-45.—It is hypothesized that there are at least 3 motivational sources for attitudes: reality testing and search for meaning; reward and punishment in relation to social acceptance; and ego defense. The latter source was studied in connection with inducing changes in attitudes toward Negroes among 243 female college students. The administration of a variety of personality and attitude scales was followed by written materials directed to changing attitudes which were of 2 sorts: information about social relations of Negroes and mechanisms of ego-defense and anti-Negro attitudes. It is concluded that, in general, giving insight into the self is more potent than giving insight into the objective nature of the problem.—R. A. Littman.

6622. Landau, Elliott D. **The relationship between social class status and what sixth grade children say is funny in selected excerpts from children's literature.** *Dissertation Abstr.*, 1956, 16, 1401-1402.—Abstract.

6623. Mulligan, Raymond A., & Dinkins, Jane C. **Socioeconomic background and theatrical preference.** *Sociol. soc. Res.*, 1956, 40, 325-328.—Data are based on replies from the sample of non-student population of a small midwestern college town. A schedule was prepared to record data gleaned in interviews. The author concludes that socioeconomic background was found to be related to theatrical preference.—S. M. Amatora.

6624. Ojemann, Ralph H. (*State U., Iowa City.*) **Changing attitudes in the classroom.** *Children*, 1956, 3, 130-134.—The author describes a non-causal approach and a causal approach in developing understanding in the classroom. Many questions need answering before one can determine the role a causal orientation in human beings plays in the prevention of mental illness and in the development of mental health. The author explains the procedures in his laboratory in the study of relationships that develop between teachers and pupils in the causally-oriented classroom as compared to such relationships in a non-causally oriented classroom.—S. M. Amatora.

6625. Orzack, Louis H. (*U. Wisconsin, Madison.*) **Preference and prejudice patterns among rural and urban schoolmates.** *Rur. Sociol.*, 1956, 21, 29-33.—Results of a sociometric questionnaire ad-

ministered to 355 students in a consolidated high school in which two-thirds of the students were urban residents, one-third rural, include: The rural student is not very popular. Rural students slightly prefer urban students as leaders. It may be that certain kinds of participation by rural students in school and non-school activities are related to the process of alienation of rural students from rural values. Substantial preference and prejudice by students for each other exists along residential lines.—H. K. Moore.

6626. Ostlund, Leonard A. **Group functioning under negative conditions.** *J. educ. Psychol.*, 1956, 47, 32-39.—Two hypotheses were tested: placed under stress of a negative nature, a college class previously determined to be "well-integrated" will demonstrate (1) a high degree of "group integration" and (2) a high degree of adequate performance. On the basis of judges' ratings the first hypothesis was supported but not the second. On the basis of the students' ratings of their own feelings and perceptions neither hypothesis was clearly supported.—F. Costin.

6627. Plant, Walter Thomas. **Attitude changes associated with a two-year college experience.** *Dissertation Abstr.*, 1956, 16, 1232-1233.—Abstract.

6628. Porter, Louis G., & Stacey, Chalmers L. (*Syracuse U., New York.*) **A study of the relationships between self-ratings and parent-ratings for a group of college students.** *J. clin. Psychol.*, 1956, 12, 243-248.—S's (N = 215) in elementary psychology rated themselves and a parent of their choice on the Guilford-Zimmerman Temperament Survey (10 traits), limiting their response to yes or no. Analyses were made of the percent of agreement and the correlations between self and parent concept for all possible sub-classifications of the total group. In general students see the parent of their choice as significantly like themselves, but the degree of agreement varies from trait to trait and from sub-group to sub-group.—L. B. Heathers.

6629. Rose, Arnold M. **Reference groups of rural high school youth.** *Child Develpm.*, 1956, 27, 351-363.—Certain of the behaviors, background characteristics and attitudes which might be related to different membership reference groups among rural high school youth are examined. The immediate family was found to be the most frequently-mentioned reference group. Intimacy of family life was correlated with many of the attitudes of the subjects, as well as with future plans.—L. S. Baker.

6630. Sakellariou, George. **A new method of character training applied on 200,000 students in Greece and Egypt.** Athens, Greece: Athens University Psychological Laboratory, 1955. 37 p.—The subjects (10-18 years of age) were asked by their teacher on a fixed day once per week to examine and mark himself before the class on a scale from 0 to 10 upon his observance of 12 virtues. A sample of the Bulletin of Character Training used for this purpose is fixed to the back cover of the book. The results are in the form of testimonials selected from those sent to the Minister of Education of Greece and the Organization of Moral Rearmament of Youth.—D. J. Wack.

6631. Voeks, Virginia. **On becoming an educated person; an orientation to college.** Philadelphia, Pa.: W. B. Saunders, 1957. xv, 147 p. \$2.00—

The book is intended to help students "profit more fully" from their 4 years in college. The table of contents has been extended into a summary of the chapters. The text is a practical presentation of the problem, the goals sought in education, and suggestions for ways to achieve these goals, how to study, how to use books, how to prepare for and take examinations, and how to change personality habits which can handicap a student.—*M. M. Gillet.*

6632. Whitehead, Frank. (U. London, Eng.) **The attitudes of grammar school pupils towards some novels commonly read in school.** *Brit. J. educ. Psychol.*, 1956, 26, 104-111.—Reactions of 1,870 pupils to novels read in secondary school English classes were elicited by a specially constructed attitude scale. Sex differences in attitude toward the 12 novels were generally insignificant. Pupil variables, including the conditions under which the novels were read, were relatively unimportant in determining attitude as compared with inherent qualities of the books themselves. Language simplicity, ease of identification, emotional immaturity in the theme, and openness of wish fulfillment correlated substantially with the children's order of preference. Wide dispersion of attitude appeared in many classes.—*R. C. Strassburger.*

6633. Wolff, Frank Arnold. **Self-parent similarity of high school girls in relation to teachers' judgments.** *Dissertation Abstr.*, 1956, 16, 1279-1280.—Abstract.

(See also abstracts 5827, 5931, 6139, 6630)

SPECIAL EDUCATION

6634. Birch, Jane R. (Pennsylvania Sch. for the Deaf, Pittsburgh.), & Birch, Jack W. **Predicting school achievement in young deaf children.** *Amer. Ann. Deaf.*, 1956, 101, 348-352.—Leiter International Performance Scale I.Q.'s on 22 boys and 13 girls (C.A.'s 3-11 to 8-6) admitted to the residential school in the years of 1952 (22), 1953 (10), and 1954 (3), were arbitrarily categorized in terms of a seven-point scale presumed to be predictive of ease of verbal learning. About six months after admittance, the children were rated, on a seven-point scale, in terms of general intelligence. In the spring of '55, supervising teachers similarly rated the pupils on educational achievement.—*T. E. Newland.*

6635. Bobroff, Allen. (Detroit Public Sch., Mich.) **A survey of social and civic participation of adults formerly in classes for the mentally retarded.** *Amer. J. ment. Defic.*, 1956, 61, 127-133.—An account is given of the social and civic performance of 2 groups of adults who 12 years before had left the Detroit Public school classes for the mentally retarded. Personal interviews with the adults were held by the author. "The group which received slightly more advanced training, the Special Preparatory, seems to have more varied and extensive interests and social activities. In addition, this group had a somewhat better voting record than did the Special B group. No significant differences were found between the two groups in other civic areas investigated.—*V. M. Staudt.*

6636. DeLeo, Gertrude M., & Boly, Louis F. **Some considerations in establishing an educational**

program for the institutionalized blind and partially sighted mentally subnormal. *Amer. J. ment. Defic.*, 1956, 61, 134-140.—"A need for a positive, functional approach in establishing an educational program for the institutionalized blind and partially sighted mentally subnormal is developed in this paper. Based on the current needs of a sample of this population the development of social acceptance is suggested as the basis for such a program with the traditional academic and recreational activities assuming a subordinate role. The proposed educational rationale necessitates a reorientation in teaching methodology. An experimental approach is presented as ideally suited toward realizing the educational objectives outlined, and its compatibility with modern learning theory is considered.—*V. M. Staudt.*

6637. Doolin, Ruie Byron. **An experiment with moderately gifted children in the public high schools of Cedar Rapids, Iowa.** *Dissertation Abstr.*, 1956, 16, 1384.—Abstract.

6638. Frampton, Merle E., & Gall, Elena D. (Eds.) (Hunter Coll., NYC) **Special education for the exceptional. Vol. II. The physically handicapped and special health problems.** Boston, Mass.: Porter Sargent Publisher, 1955. 677 p. \$5.50.—The contributions of 56 persons are organized into chapters on the physically handicapped (the blind, the partially sighted, the deaf, the hard of hearing, the orthopedically handicapped, and the cardiopathic) and into chapters on special health problems (special health problems, the multiply handicapped, leprosy, muscular dystrophy, the tuberculous, and the home-bound and hospitalized. A listing of agencies, periodicals, and references is provided for all but the 2 chapters on special health problems and the multiply handicapped. (See 30: 6303.)—*T. E. Newland.*

6639. Frampton, Merle E., & Gall, Elena D. (Eds.) **Special education for the exceptional. Vol. III. Mental and emotional deviates and special problems.** Boston, Mass.: Porter Sargent Publisher, 1956. xxvi, 698 p. \$5.50.—The editors have grouped the 58 contributions under the chapter headings: the intellectually gifted, the brain-injured, the cerebral palsied, the hemiplegic, the epileptic, the emotionally disturbed, juvenile delinquency, the mentally handicapped, the aged, the narcotic, and the alcoholic. Bibliographies accompany each chapter, with listings of agencies and periodicals where relevant. (See 30: 6303; 31: 6638.)—*T. E. Newland.*

6640. Freeman, David R. (Pacific State Hosp., Spadra, Calif.), Ott, Walter W., & Dinsmore, Mayme. **School program for mentally retarded adults.** *Amer. J. ment. Defic.*, 1956, 61, 94-104.—A program for mentally retarded adults at the Pacific State Hospital is described in terms of its goals and purposes, general academic curriculum, pre-vocational training, and personal training. An evaluation as well as recommendations is also presented by the authors.—*V. M. Staudt.*

6641. Hegge, Thorleif G. (Wayne County Training Sch., Northville, Mich.), Douglas, Marcella E., Lemler, Maxine M., Etz, Elizabeth; Hartley, E. Twyla; Vuillemot, Lawrence; Keller, James E., & Rosenblum, Sidney. **Some aspects of the Wayne County Training School: an institution for higher grade and borderline mentally retarded children.**

Amer. J. ment. Defic., 1956, 61, 58-93.—Papers are presented on the following: the institution, the school, pre-adolescent boys in an activities program, teacher-pupil rapport, clothing construction and good grooming, an attempt to understand reading failure in a mentally handicapped boy—a case study, and the purpose and function of the department of psychology at Wayne County Training School.—V. M. Staudt.

6642. Kolstoe, O. P. (*Southern Illinois U., Carbondale.*) **Sensory stimulation and specific responses.** *Except. Child.*, 1956, 23, 2-4, 38, 48.—Modern educators of the mentally retarded could profitably ponder the clues for action given by the work of Itard, Seguin, and Montessori. While the unit method of instruction provides excellent opportunities for the practice of transferring basic skills to behavior areas, careful attention should be given to sense training programs, especially up to the age of 10. The combination of methods "seems to be necessary for the total development of mentally handicapped youngsters in special classes."—J. J. Gallagher.

6643. Martin, Bertha W. **Teaching extremely retarded children: mental age 3-5.** I.Q. 30-50. *Kent State Univ. Bull.*, 1955, 43(1), 70 p.—Written for the prospective classroom teacher of the extremely retarded child this book covers a large variety of topics some of which are as follows: principles and philosophy, steps in development, preparatory organization, parent-teacher relationships, public relations, materials, skills, speech training, audio-visual aids and play periods.—V. M. Staudt.

6644. Pittenger, Priscilla. (*San Francisco St. Coll., Calif.*) **New approaches to teaching the young deaf child.** *Amer. Ann. Deaf*, 1956, 101, 340-347.—Educational methods generally used with the deaf early employed, and even pioneered in, psychologically sound procedures. However, certain of the practices need to be critically viewed in the light of the present status of our knowledge of (1) child growth and development (especially in the area of language), (2) the significance of the use of dynamic materials, (3) readiness for learning, (4) new procedures in visual aids, and (5) language as a means rather than an end in itself. Some possibilities in using "unit teaching" are suggested.—T. E. Newland.

6645. Stedman, Edith. (*U. Minnesota, Minneapolis.*) **The gifted student and student personnel programs in colleges and universities.** Pasadena, Calif.: Western Personnel Institute, 1956. 47 p. \$1.00.—Recent literature is reviewed, present methods of handling gifted students discussed. Latter half of booklet treats results of questionnaire about practices with gifted students. Survey results discuss identification, academic programs, underachievement, student personnel services and respondent suggestions about problem of underachievement and possible improvement in student personnel services. 56 references.—F. A. Whitehouse.

6646. Strazulla, Millicent. (*Jewish Hosp., Brooklyn, N. Y.*) **Nursery school training for retarded children.** *Amer. J. ment. Defic.*, 1956, 61, 141-151.—The author feels that mentally retarded children profit from supervised group experiences. It is felt, however, that a child who has not attained a developmental potential of two years may not be prepared

for a structured group program. "Chronological age or low test scores do not predict how well a child can adjust to a regular nursery school program. In determining his placement within a specific group in the school, chronological age is the least important factor. Usually, his level of performance is a more reliable indicator. The child will benefit most when clinic and school can work in close harmony with the parents and the child, mutually helping in the rehabilitation plan. It is only through their combined efforts that a refinement of diagnosis and a perfection of techniques for training can be evolved." 19 references.—V. M. Staudt.

6647. Tramer, M. **Zum Problem des Einzelnen und der Gemeinschaft in der Erziehung psychisch gestörter Kinder und Jugendlicher.** (The problem of the individual and the group in the education of disturbed children and adolescents.) *Z. Kinderpsychiat.*, 1956, 23, 112-116.—Tramer reviews Israeli writings: Israeli children suffer a variety of difficulties in growing up: extraction from highly different stocks and backgrounds, varying levels of culture and religious tradition, the rate of immigration into the new country. Among many 13 year olds, reading is an unaccustomed activity. Individual and group integration are achieved in part by singing, dancing and play and by application of the child's special talents.—G. Rubin-Rabson.

(See also abstracts 6351, 6533)

EDUCATIONAL GUIDANCE

6648. Bagley, Norton Russell. **Some factors affecting the occupational choices of sixth and eighth grade rural boys.** *Dissertation Abstr.*, 1956, 16, 1638.—Abstract.

6649. Brugger, A. T., & Atkinson, B. H. (*U. California, Los Angeles.*) **Cherchez les différences.** *J. higher Educ.*, 1956, 27, 297-300.—Counseling programs for foreign students in American universities are discussed critically. Massive orientation programs are of little value, particularly if they assume that foreign students are alike just because they are foreign. Differences must be recognized, difficulties in communication must be overcome, and in counseling it must be realized that the foreign student will return to a culture and possibly a system of values quite different from those of the American student.—M. Murphy.

6650. Calhoun, Samuel Reed. **The effect of counseling on a group of eighth-grade under-achievers.** *Dissertation Abstr.*, 1956, 16, 1397-1398.—Abstract.

6651. Coyle, Emerson. **Counselor prediction of academic success.** *Dissertation Abstr.*, 1956, 16, 1280-1281.—Abstract.

6652. Fontanella, M. A. **The military instructor's role in guidance.** *J. higher Educ.*, 1956, 27, 301-307; 349.—Beginning with a distinction between guidance provided by specialists and that provided by instructors, the author goes on to discuss the counseling functions which the military instructor can perform, both in a directive and a non-directive fashion.—M. Murphy.

6653. Greenfield, Norman S., & Fey, William F. **Factors influencing utilization of psychotherapeu-**

tic services in male college students. *J. clin. Psychol.*, 1956, 12, 276-279.—The MMPIs of 132 entering male college students, who at some point in their four year college course sought psychotherapy at a student health psychiatric clinic, were examined with the object of testing the hypothesis that promptness of referral is positively related to the degree of anxiety, the extent of internalization, the amount of discomfort and the severity of pathology. None of these variables proved to be significantly related to the number of months which intervened between the time of taking the test and the appearance at the clinic. It is concluded that, for the population studied, these measures are not indices of therapeutic readiness.—*L. B. Heathers.*

6654. **Hanson, Robert J.** A study of college admission counseling in Michigan. *Dissertation Abstr.*, 1956, 16, 1641.—Abstract.

6655. **Hilton, M. Eunice. (Ed.)** Guidance in the age of automation. Syracuse, N. Y.: Syracuse University Press, 1957. v, 94 p. \$2.50.—Topics discussed included the challenge of automation, relationship of guidance and personnel services to the total educational program, the university as a community; a plea for research, new frontiers in guidance, some emotional factors in counseling, student personnel administration and the personality of the administrator, relation of architecture to educational values in residence halls, dealing with emotional problems of college and high school students, the teacher as a counselor, school-college relationships, and adapting theory to practice in student personnel work.—*W. Coleman.*

6656. **Hilton, M. Eunice. (Ed.)** Guide to guidance, Volume 18; a selected bibliography of 1955 publications of interest to deans, counselors, advisers, teachers, and administrators. Syracuse, N. Y.: Syracuse University Press, 1956. 56 p. \$1.00.—An annotated bibliography of materials of broad interest to student personnel workers has been prepared. Section I, "The Broad View of Education," includes a variety of papers on various educational problems. Section II covers special programs and methods in education such as exceptional children, adult education, television, and family life education. Section III is devoted to the individual, his nature and relationships. Section IV covers guidance and student personnel work in 9 topical groups. Also provided are subject and author indexes, a directory of publishers, and a list of periodicals.—*W. Coleman.*

6657. **Hilton, M. Eunice. (Ed.)** Guide to guidance, Vol. 19. A selected bibliography of 1956 publications of interest to deans, counselors, advisers, teachers, and administrators. Syracuse, N. Y.: Syracuse University Press, 1957. 57 p. \$1.00.—An annotated bibliography of the literature in guidance and student personnel work published during 1956. The section on guidance and student personnel work covers these areas: Philosophy and organization, The guidance worker, The teacher and the specialist, Tools and techniques, Methods of working with students, Areas of special concern, Housing and college unions, and Sources of materials and information. A list of the periodicals reviewed along with a directory of publishers are included.—*W. Coleman.*

6658. **Lougheed, Virgil Robert.** A study of administrative, counseling, and social practices af-

fecting foreign students at an urban university. *Dissertation Abstr.*, 1956, 16, 1625.—Abstract.

6659. **Recktenwald, Lester Nicholas.** The psychological inventory for vocational orientation within the framework of personality theory and social factors. Villanova, Pa.: Villanova Press, 1956. 34 p.—As a means of guiding a student toward a suitable vocational objective, Recktenwald has prepared "The Psychological Inventory for Vocational Orientation." The student is expected to answer questions or to respond to material in the following sections of the inventory: A Time Analysis, Analysis of Background, Analysis of the Work-World and the subject fields, The Autobiography, Tentative Selections of Goals, The Test Record, and Notes. For the counselor or instructor, there is a two page summarization of the author's theoretical orientation on vocational selection and the assumptions made in using the inventory. A brief bibliography.—*W. Coleman.*

6660. **Reed, Harold J. (Los Angeles Co. Sch., Calif.)** The student survey: a multi-purpose guidance instrument. *Calif. J. educ. Res.*, 1956, 7, 174-177.—The manner of obtaining evaluative and informational data on both high school and a junior college program is described, some findings are presented, and other possible uses of the device constructed are indicated.—*T. E. Newland.*

6661. **Rusmore, Jay T.** Fakability of the Gordon Personal Profile. *J. appl. Psychol.*, 1956, 40, 175-177.—A Group of 81 college students were administered the Gordon Personal Profile, first under directions to simulate applying for industrial employment, and then in a simulated guidance situation. A total score difference "not of great practical significance" equivalent to an increase of about 8 percentile points was found, in favor of a "better" score for the industrial situation. "Present results support the contention that the Gordon Personal Profile . . . probably is less subject to "faking" than inventory-type instruments."—*P. Ash.*

6662. **Stripling, Robert O. (Chm.)** Guidance services in the public schools. A report of the Southern States Work Conference on Educational Problems. Tallahassee, Fla.: State Department of Education, 1956. vi, 61 p. 40¢.—A 3-year study by 80 Southern educators forms the basis for this report. Topics discussed are the socioeconomic environment in which Southern youth live, the needs of Southern youth, the status of guidance services in the Southern states, and competencies and professional preparation needed for the guidance worker, as well as some guide lines for developing guidance services.—*H. D. Arbitman.*

6663. **Wall, W. D. (Ed.)** Psychological services for schools. New York: New York University Press, 1956. 150 p. \$2.75.—The application of psychology to schools is developed from an historical point of view to a contemporary presentation of existing conceptions and services of psychologists in European schools. How school psychologists function in Austria, Belgium, Denmark, France, Italy, Spain, Sweden, Switzerland, United Kingdom and Yugoslavia is discussed in terms of purposes, problems and training programs. The book concludes with a report by an expert study group on psychological services for schools which discusses the function of the school

psychologist, his relationship to exceptional children, normal children, teachers and parents.—*E. M. Bower.*

6664. **Williamson, E. G.** (*U. Minnesota, Minneapolis.*) **Preventive aspects of disciplinary counseling.** *Educ. psychol. Measmt.*, 1956, 16, 68-81.—Disciplinary problems arise not only from self-adjustment problems but also from interrelationship situations. Six dimensions of student personnel services are discussed as being effective in the prevention of disciplinary behavior: (1) Early identification of deviant personalities; (2) more recreational resources; (3) workable rules and periodic review of rules for students; (4) high institutional morale enabling students to have an affective identification with the school; (5) frequent consultation with student leaders; and (6) more positive action towards education for values.—*W. Coleman.*

(See also abstracts 6021, 6084)

EDUCATIONAL MEASUREMENT

6665. **Bailey, Robert Bain.** **A study of predicting academic success in elementary school reading from projective tests.** *Dissertation Abstr.*, 1956, 16, 1397.—Abstract.

6666. **Barthol, Richard P., & Kirk, Barbara A.** **The selection of graduate students in public health education.** *J. appl. Psychol.*, 1956, 40, 159-163.—Using as criteria ranking of the students on academic performance by 3 faculty judges, and of those who subsequently graduated on field performance, the validity of the SVIB, MMPI, Concept Mastery Test, and the American Public Health Association Examination for selecting graduate students for a public health education curriculum was studied. Only the APHA Examination, an achievement test, ranked the students in approximate order of later success, although the others gave evidence of usefulness for negative screening to eliminate poor students.—*P. Ash.*

6667. **Bloom, Benjamin S.** (*U. Chicago, Ill.*), & **Heyns, I. De V.** **Development and applications of tests of educational achievement.** *Rev. educ. Res.*, 1956, 26, 72-88.—A total of 124 studies are examined under the headings of development of testing techniques, evidence of change in learners by teaching method or content, prediction of academic achievement, educational placement and diagnosis, scoring and normative problems, analyses of student responses to tests, problems of communication among test specialists, test users, and students, and needs and trends.—*W. W. Brickman.*

6668. **Brice, Marshall Moore.** **A comparison of subjective predictions with objective predictions of college achievement.** *Dissertation Abstr.*, 1956, 16, 1622.—Abstract.

6669. **Christensen, Clifford M.** (*U. Arkansas, Fayetteville.*) **A note on Borow's College Inventory of Academic Adjustment.** *J. educ. Res.*, 1956, 50, 55-58.—The Inventory was administered to 50 over-achievers (based on relation of honor-point ratio to ACE score) and 50 under-achievers. Significant differences in favor of the over-achievers were found between the groups on total score, and on scores of 3 of the 6 parts of the test.—*M. Murphy.*

6670. **Dressel, Paul L. & Nelson, Clarence H.** (*Michigan State U., East Lansing.*) **Questions and problems in science, test item folio no. 1.** Princeton, N. J.: Educational Testing Service, 1956. xvi, 805 p. \$27.50.—This is the first of a series, that will include social science and the humanities, designed to present test materials useful to teachers in general education science courses. The items are predominantly of the objective type, although some essay items and problems are included. There are 6442 items in biological science, classified under 31 content categories; and 7200 physical science items presented in 29 categories. In addition, each item is classified according to a taxonomy of educational objectives. Sample directions and a 32-item bibliography are included.—*R. L. McCornack.*

6671. **Educational Testing Service.** **Essential characteristics of a testing program.** Princeton, N. J.: Author, n.d. 11 p.—A testing program must be integrated with the total school program. It must have defined purposes such as instructional planning and evaluation, educational and vocational guidance, administrative appraisal, or parent guidance. The purposes of the testing program must be clear to teachers, students, and parents. Appropriate tests must be carefully selected and personnel trained in administering and interpreting the tests. Systematic records should be kept and special interpretive materials made available.—*W. Coleman.*

6672. **Edwards Penfold, D. M.** (*U. London, Eng.*) **Symposium: The use of essays in selection at 11+. I. Essay marking experiments: shorter and longer essays.** *Brit. J. educ. Psychol.*, 1956, 26, 128-136.—A random sample of 165 compositions was re-marked by 15 of the examiners. Analysis of variance revealed great variability "between examiners," and between the marks of the same examiner on the two occasions. A further study of the analytic marking of a 20-minute essay again showed a high variance ratio "between examiners." The variance ratio "between candidates" was also high, suggesting a tendency for examiners to place the candidates in the same order of merit, but it was not large enough to indicate that correction according to the examiner's individual standard would have produced marks entirely free from error.—*R. C. Strassburger.*

6673. **Englehart, Max D.** (*Chicago Pub. Sch., Ill.*) **Testing and use of test results.** *Rev. educ. Res.*, 1956, 26, 5-13.—Discusses various developments which led to improvements in the construction of tests and in testing procedures in public schools and in higher education. Special note is taken of sources of information on testing. 58 references.—*W. W. Brickman.*

6674. **Frick, J. W.** (*U. Southern California, Los Angeles*), & **Kenner, Helen E.** **A validation study of the prediction of college achievement.** *J. appl. Psychol.*, 1956, 40, 251-252.—"A regression equation derived from the ACE and six clinical scales of the MMPI in an experimental group of 267 freshman women at the University of California, Santa Barbara College, was applied in the prediction of GPA to a similar cross-validation group at the same institution. The shrinkage in the coefficient of determination . . . can be attributed to the regression phenomenon, sam-

pling errors, and the influence of variables not measured by the prediction scales."—P. Ash.

6675. **Hewer, Vivian H.** (*U. Minnesota, Minneapolis.*) **A comparison of successful and unsuccessful students in the medical school at the University of Minnesota.** *J. appl. Psychol.*, 1956, 40, 164-168.—Test performance of 215 passing medical students was compared with that of 29 drop-outs because of scholastic failure. Mean score differences were computed for 9 measures, including high school rank, 2 honor-point ratio (grade) measures, ACE, Coop English Test, Medical College Admission Test, Minn. Medical Aptitude Test, SVIB, MMPI. Successful students make significantly higher pre-med course grades, Minn. Medical Aptitude Test scores, ACE scores, and lower scores on the L-scale of the MMPI. The other variable yielded only uncertain or no differentiation.—P. Ash.

6676. **Isard, Eleanore S.** (*Temple U., Philadelphia, Pa.*) **The relationship between item ambiguity and discriminating power in a forced-choice scale.** *J. appl. Psychol.*, 1956, 40, 266-268.—“(a) In questionnaire format, *Ambiguous* statements were more valid than either *Positive* or *Negative* statements for differentiating college achievers from non-achievers. (b) In general, the validity of *Ambiguous* items either held up or increased in forced-choice format. (c) The 12-tetrad inventory consisting almost exclusively of *Ambiguous* items was found to have substantial reliability and validity for the purpose used, and did not appear to lend itself to willful misrepresentation on the part of the subjects.—P. Ash.

6677. **Johnson, A. Pemberton; Olsen, Marjorie A., & Winterbottom, John A.** **The law school admissions test and suggestions for its use: a handbook for law school deans and admissions officers.** Princeton, New Jersey: Educational Testing Service, 1955. 148 p.—A handbook written for non-psychologists describing the Law Admissions Test. The first two chapters discuss the use of the test in admissions and counseling, and some basic principles of testing. The next three chapters discuss the use of local norms, and the expression of validity in terms of expectancy tables and per cent agreement when using the test for several specific purposes. The final two chapters are case studies in the use of the test in five law schools and a description of several prediction studies conducted by ETS.—R. L. McCornack.

6678. **Jones, Tom M.** **Comparisons of test scores of high school graduates of 1954 who go to college with those who do not go, and a study of certain factors associated with going to college.** *Dissertation Abstr.*, 1956, 16, 1373.—Abstract.

6679. **Marchal, Renée.** **Les mensurations psychopédagogiques. III. La géométrie.** (Psychopedagogical measurements. III. Geometry.) Louvain, Belgium: Laboratoire de Pédagogie Expérimentale, Université Catholique de Louvain, 1956. 284 p.—In the preface the dearth of standardized tests in France is deplored. The introduction indicates that individual differences in geometric ability and achievement among students of elementary geometry are great. The 28 pages of Part I deal with geometry tests in the French language, no more than 6 in all. Then 200 pages are devoted to detailed description, analysis, and criticism of geometry tests published in

English, considerable use being made of Buros's mental measurement yearbooks. Finally, on pages 262-263 are listed the 19 aptitude, achievement, instructional, and practice tests in geometry (out of 55) considered best by the author. 200-item bibliography.—J. C. Stanley.

6680. **Patterson, C. H.** **The prediction of attrition in trade school courses.** *J. appl. Psychol.*, 1956, 49, 154-158.—For a sample of 350 trade school students, a test battery comprising the Bennett Test of Mechanical Comprehension, Revised Minnesota PFB, and AGCT were used to develop a selection battery. In addition, data were collected on 18 background and socioeconomic factors. “The results obtained indicate that it is possible to predict, with significantly greater than chance success, persistence in trade school training for at least six months, [but] . . . the degree of accuracy of prediction achieved leaves much to be desired.”—P. Ash.

6681. **Reilly, James.** **The development of a technique to measure a component of critical thinking in the physics area.** *Dissertation Abstr.*, 1956, 16, 1415-1416.—Abstract.

6682. **Schutter, Genevieve, & Maher, Howard.** (*Iowa State Coll., Ames.*) **Predicting grade-point average with a forced-choice study activity questionnaire.** *J. appl. Psychol.*, 1956, 40, 253-257.—“In an attempt to introduce the lesser transparency of forced-choice technique into the study test area, preference and discrimination indices were first computed from the responses of 99 over- and underachievers to 300 attitude, skill, and unclassified items. 30 Richardson-type forced-choice blocks were next submitted to 300 students. . . . Skill and attitude statements appeared to contribute about equally to the validity. The total test scores did not correlate significantly with sex or class (year) membership. Discussion of the results has centered about possible reasons for the lesser validity of the forced-choice technique in this test as compared with other areas.”—P. Ash.

6683. **Schwartz, Alfred; Tiedeman, Stuart C., & Wallace, Donald G.** **Evaluating student progress in the secondary school.** New York: Longmans, Green, 1957. xi, 434 p. \$4.75.—In 19 chapters the following topics are covered: Evaluation in education; When, what, who, where and how of evaluation; Identifying educational outcomes; Determination of classroom objectives; A measurement rationale; General suggestions for test construction; Constructing and using objective tests; Construction and use of essay and short answer tests; Checklists, rating scales, inventories, and questionnaires; Use of observation, anecdotal records, and interviews; Using sociometrics, sociodrama, autobiography, and other informal techniques; The case study and the case conference; Standardized tests—Some general considerations; Standardized tests—application; Interpretation of test scores; Diagnosis from the results of measurement; Guiding student progress; Reporting pupil progress; and Evaluation and the teaching-learning situation. 28 references.—W. Coleman.

6684. **Thorndike, Robert L.** (*Teachers Coll., Columbia U., New York.*) **Development and applications of tests of special abilities.** *Rev. educ. Res.*, 1956, 26, 14-25.—Describes recent aptitude batteries and tests; studies of published aptitude bat-

teries; reports on the prediction of success in professional training; studies on the relation of general tests of academic aptitude or achievement to actual school grades; researches on the validation of tests with various criteria for success in jobs; follow-up studies of aptitude test results as related to later scholastic and employment histories; and studies dealing with methodological problems. 87-item bibliography.—*W. W. Brickman.*

6685. Webb, Sam C. (Emory U., Ga.) **Differential prediction of success in a graduate school.** *J. educ. Res.*, 1956, 50, 45-54.—Results of the use of 3 predictor variables in the Graduate School of Emory University are reported: undergraduate transcript, Cooperative General Culture Test, and Cooperative English Test. Criteria of success were academic achievement, ability of student to express himself in writing, and research. In general the predictors correlated to a lesser degree with research than with any other criterion.—*M. Murphy.*

(See also abstracts 5326, 5838, 6041, 6053, 6071, 6651)

EDUCATION STAFF PERSONNEL

6686. Aubert, Vilhelm; Haldersen, Grethe, & Tiller, Per Olav. **Lærernes holdning til yrkesrollen og oppdragelsesspørsmål: En sammenliknende intervjuundersøkelse med bidrag fra 7 vest-europeiske land.** (Teachers' conception of their professional role and their responsibility in the education of the child: A comparative study employing interview material from 7 west European countries.) *Norsk ped. Tidsskr.*, 1956, 40, 81-113.

6687. Barry, Ruth; Hall, Harvey; Lloyd-Jones, Esther; Shrewsbury, Thomas; Wellington, Jean, & Wolf, Beverly. **Case studies in college student-staff relationships.** New York: Bureau of Publications, Teachers College, Columbia University, 1956. ix, 117 p. \$2.00.—22 cases concerned with problems of interpersonal relationships between college students and staff members. These cases resulted from long term experimentation with the case study method in teaching about human relations. Study and discussion questions follow each case.—*F. Costin.*

6688. Clarke, Albert Thompson. **A study of the validity of the Minnesota Teacher Attitude Inventory as an instrument to aid in the selection of directing teachers.** *Dissertation Abstr.*, 1956, 16, 1404.—Abstract.

6689. Dayal, Bhagwan. **Teaching ability and its assessment.** *Univ. Rajputana Stud. (Educ.)*, Jaipur, 1955, 117-126.—The qualities of a successful teacher fall under 2 heads: (1) his personality—to be assessed from various aspects, viz., his physical, intellectual, emotional and social qualities, and (2) his professional equipment—comprising of scholarship and professional preparation, class-room management, instructional skill and ability and willingness to cooperate with others. The author suggests that the factors of personality should be given less weight and that the opinions of the teachers-under-training should also be taken into consideration while assessing a teacher. An assessment form appears in the appendix.—*U. Pareek.*

6690. de Grummond, Lena Young. **The status of the retired white teachers of Louisiana.** *Dissertation Abstr.*, 1956, 16, 1615-1616.—Abstract.

6691. Diskin, Philip. **A study of predictive empathy and the ability of student teachers to maintain harmonious interpersonal relations in selected elementary classrooms.** *Dissertation Abstr.*, 1956, 16, 1399.—Abstract.

6692. Gall, Morris, & Peters, Max. **Authority in education.** *Educ. Adm. Superv.*, 1956, 42, 23-28.—An inquiry into the problem of discipline (teacher-student) and supervision-administration (teacher-principal) from the viewpoint of authority.—*S. M. Amatora.*

6693. Patrick, T. L. (Tulane U., New Orleans.) **The importance of evaluating the work of the individual teacher.** *Educ. Adm. Superv.*, 1956, 42, 4-9.—The work which goes on under the direction of each classroom teacher determines in the final analysis the kind of school the community will have. The author shows the great importance of evaluating the work of the teachers as follows: (1) changed emphasis in supervision; (2) the need of the teacher for evaluation; (3) evaluation and the shortage of teachers; (4) importance of evaluation by the principal; and (5) implications for the principal.—*S. M. Amatora.*

6694. Sachs, Benjamin M. **"Flexibility" and "rigidity" in the role perception of selected administrators with regard to vocation.** *Educ. Adm. Superv.*, 1956, 42, 46-53.—The author studied the directions which the role of perception as related to vocation and income took in the case of 14 elementary school administrators. Method used was the open-ended structured interview, an adaptation of that used by Adorno. Findings of all aspects of the study are given in detail. A five-point summary and a list of references are included.—*S. M. Amatora.*

6695. Sachs, Benjamin M. **An investigation of attitudes toward minorities and "race" on the part of selected elementary school administrators.** *Educ. Adm. Superv.*, 1956, 42, 29-45.—Using the rationale of Adorno, the author studied 14 elementary school administrators by means of a structured open-ended interview concerned with their attitudes toward minorities. Recorded replies indicated that the group fell into 2 divisions: the first, that of acceptance at all social levels; and the second, that of rejection. Two of the members fell into an ambivalent group. Discussion and analysis of the findings of each group are given in detail. 17 references.—*S. M. Amatora.*

6696. Sorenson, A. Garth. (U. California, Los Angeles.) **A note on the "fakability" of the Minnesota Teacher Attitude Inventory.** *J. appl. Psychol.*, 1956, 40, 192-194.—To test whether prospective teachers can fake the MTAI, and whether signing his name influences his score, 406 prospective teachers were administered the MTAI, first under standard directions and then under directions to "fake." Directions to "fake" resulted in significantly higher (more "progressive") attitude scores; under standard directions the anonymous respondents had a lower mean score than the signers. The implications for use of the Inventory in counseling and in selection are mentioned.—*P. Ash.*

6697. Stanley, Julian C. (U. Wisconsin, Madison.) **The interdependent roles of research and evaluation in teaching.** *Educ. Leadership*, 1956, 7, 419-424.—"Research and evaluation go together, being at times virtually interchangeable or even synonymous." In regard to present day teacher research, the author states, "... most 'research' by teachers at best generates hypotheses rather than tests them." The author presents 3 illustrations of informal "research" and an outline of a well-structured research project.—M. M. Kostick.

6698. Thompson, Daniel Calbert. **Teachers in Negro colleges (a sociological analysis).** *Dissertation Abstr.*, 1956, 16, 1531-1532.—Abstract.

6699. Wood, Gertrude. (Los Angeles Co. Schools.) **An evaluation of the child study program in Los Angeles County.** *Calif. J. educ. Res.*, 1956, 7, 168-173.—The responses of approximately 300 teachers to (1) The Case of Mickey Murphy, (2) Wandt's Teacher Opinion Scale, (3) Reed's Sentence Completion Test, and (4) an evaluative and informational inquiry form "suggest that a relationship exists between the extent of participation in the ... Program and certain professional skills, attitudes, and understandings." Differences were found between those within and those outside the Program, as well as between those in the Program for varying amounts of time.—T. E. Newland.

(See also abstract 5291)

PERSONNEL PSYCHOLOGY

6700. Argyris, Chris. **Executive development programs: some unresolved problems.** *Personnel*, 1956, 33, 33-41.—Management development programs too frequently exist without recognition of the inaccuracy or limitations of their basic assumptions, without clear objectives, without concern for the working milieu, and without study of appropriate training methods or content. The behavioral sciences are developing a body of theory and knowledge which can assist in rectifying these errors, and several suggestions (emphasizing skills in living) are offered.—D. G. Livingston.

6701. Bair, John T., Lockman, Robert F., & Martoccia, Charles T. **Validity and factor analyses of naval air training predictor and criterion measures.** *J. appl. Psychol.*, 1956, 40, 213-219.—"The most substantial relationships existed between tests of academic aptitude and grades in the pre-flight phase of training. Tests of spatial and perceptual abilities correlated highest with final basic and advanced flight grades. Four significant factors derived by factor analysis were: perceptual, academic potential, comprehension of relationships, and applied spatial relations [these factors, however, accounted for only 51 percent of the total variance]. Although the inclusion of criterion variables did not reveal any new factors, it did aid considerably in defining those factors found." 15 references.—P. Ash.

6702. Banks, Olive. (U. Liverpool, Eng.) **Continuous shift work: the attitudes of wives.** *Occup. Psychol.*, 1956, 30, 69-84.—A change from the ordinary three shift system to a continuous shift system required regular week-end work of 103 men, all of whom are married. Of these wives, it was possible

to interview 73 in an attempt to determine their attitude to the new arrangement. It is concluded that there was a general antipathy to continuous shift work primarily due to interference with normal week-end pleasures, but springing from several sources.—G. S. Speer.

6703. Baumgartel, Howard John, Jr. **Leadership, motivation and attitudes in twenty research laboratories.** *Dissertation Abstr.*, 1956, 16, 1518.—Abstract.

6704. Bornemann, Ernst. **Psychologische Funktionssystematik zur Berufsanalyse, Eignungsdiagnostik und Personalbeurteilung.** (Systematization of psychological functions in job analysis, diagnosis of aptitude and evaluation of personnel.) *Psychol. Rdsch.*, 1956, 7, 193-203.—A systematized schema for psychological diagnosis has been constructed based on Klages, Rohrer, and Lersch in respect to character functions, on Meili and Thurstone in respect to intelligence functions. Diagram of system.—W. J. Koppitz.

6705. Browne, C. G., & Shore, Richard P. (Wayne State U., Detroit, Mich.) **Leadership and predictive abstracting.** *J. appl. Psychol.*, 1956, 40, 112-116.—83 employees representing 4 echelons were administered an attitude questionnaire dealing with job satisfaction, economic issues, and social issues. Then each echelon predicted the attitudes of department managers as one group and non-supervisory personnel as a second group. The data generally support the hypothesis that predictive abstracting is an aspect of leadership, with the following specific observations: (1) the supervisory personnel predicted more accurately than the non-supervisory and (2) the more focal supervisory echelons predicted more accurately than the less focal.—P. Ash.

6706. Dorizon, Bernard. **Une fausse conception de la formation.** (A false conception of training.) *Travail et Méth.*, 1956, 107, 23-24.—To delegate entirely the function of training is a resignation of authority. In business and industry, the training of personnel must be the personal responsibility of management. To deliver trainees to impersonal, outside teachers, is an intellectual and moral flight on the part of the heads of business and industry.—G. H. Mowbray.

6707. Dunnette, Marvin D. (Minnesota Mining & Manufacturing Co., St. Paul), & Heneman, Herbert G., Jr. **Influence of scale administrator on employee attitude responses.** *J. appl. Psychol.*, 1956, 40, 73-77.—"The results gave support to the following hypotheses: 1. A threat to employees' feelings of anonymity results in their responding more favorably to an attitude survey than employees not so threatened. 2. A threat to anonymity results in differential amounts of response distortion depending upon the content of different items comprising the questionnaire. 3. Employees feeling a threat to anonymity tend to give fewer and shorter responses to open-end questions than employees not so threatened." —P. Ash.

6708. High, Wallace S. (U. Southern Calif., Los Angeles), Goldberg, Lisbeth L., & Comrey, Andrew L. **Factored dimensions of organizational behavior. III. Aircraft supervisors.** *Educ. psychol. Measmt.*, 1956, 16, 38-53.—A 106-item questionnaire

was administered to 213 Lockheed Aircraft supervisors. Responses of 100 selected cases were "... subjected to a modified Wherry-Gaylord iterative item analysis, the purpose of which was to render the dimensions more nearly independent." This yielded a new scoring procedure which was applied to a new sample of supervisors who completed the questionnaire. A factor analysis was then undertaken yielding 8 centroid factors. These were identified as Communication, Consultative supervision, Efficient management, Pressure for Production, Counseling, Paternalism, Irresolute supervision, and Familiarity with subordinates. (See 30: 7807.)—*W. Coleman.*

6709. Jennings, Eugene Emerson. (*Michigan State U., East Lansing.*) **Today's group training problems.** *Personnel J.*, 1956, 35, 94-97.—Perhaps training in large groups which aims at encouraging and directing participation, and enhancing group agreement and decisions only increases the need for more leadership and better human relations. Group training has tended to suppress critical thinking of the individual forcing him to accept the thinking of the group, so that the "other directed" persons are becoming the leaders. By expressing themselves freely in groups the trainees learn to verbalize but not to solve their problems. Training directors have emphasized large groups, although the results of the training may be questionable, instead of superior training of small groups.—*M. B. Mitchell.*

6710. Lanzetta, John T., & Knoell, Dorothy M. (*Randolph AFB, Tex.*) **A comparative study of the attitudes of student groups in advanced flying training.** *USAF Person. Train. Res. Cent., Res. Rep.*, 1955, No. AFPTRC-TN-55-30, vi, 21 p.—On the assumption that motivation and "tiger" qualities would be reflected in attitudes toward general aspects of flying, combat and Air Force life, this study employed attitude measures as criteria of the effectiveness of an Air Force project to improve the motivation of flying applicants and trainees toward jet flying and combat by increasing individual aggressiveness and self-confidence (Project Tiger). The findings showed that Project Tiger did not produce uniformity in these attitudes and that bases varied both in extent and direction of attitude changes during training as well as in mean level of graduates, base differences being associated with mission assignments.—*S. B. Sells.*

6711. Méchin, J. **Comment notez-vous votre personnel?** (How do you rate your personnel?) *Travail et Méth.*, 1956, 103, 30-33.—Rating is a delicate operation which, to be successful, cannot be left with impunity to just anyone. It is essential for its success that it follow carefully prescribed lines and that total knowledge of the system be made available to personnel being rated. To be efficacious, the method used must provide for a general statistical control of the results. Various rating methods are discussed along with the pitfalls common to them.—*G. H. Moubray.*

6712. Newman, Jack, & Fine, Sidney A. **A note on Thorndike's preference blank for psychologists.** *Amer. Psychologist*, 1956, 11, 334-336.—The 50 items comprising the 5 Thorndike clusters were rated by 2 experienced job analysts in terms of the Methods Groups and Worker Functions factors. It was discovered that the ratings grouped themselves into

functional areas. "It is suggested that the judgment of trained job analysts working within a conceptual framework of the world of work ... can arrive at such decisions of classification and clustering without the involved and prolonged statistical treatment used by Thorndike. Moreover, it provides a device for generating and presenting this type of item in a meaningful manner." Four stages in the application of the "functional technique" are indicated.—*S. J. Lachman.*

6713. Northcott, C. H. **Personnel management; principles and practice.** (3rd ed.) New York: Philosophical Library, 1956. vii, 428 p. \$10.00.—This edition (see 25: 6497) adds 6 new chapters including materials on organization and industrial relations and much new material on the subject of wages. The text is divided into two sections. In Part I, Principles (9 chapters), the organization and place of personnel management, its aims, policies and procedures, financial and other incentives, the working situation, psychology of the working group, industrial relations dynamics, and the topic of joint consultation are reviewed. In Part II, Practice (11 chapters), the techniques and procedures of personnel management in the areas of employment, selection, training, wage administration, education, health and safety, and employee services are brought together.—*P. Ash.*

6714. Randall, Raymond L. (Ed.) **Executive development in action: patterns and techniques; based upon proceedings of the First and Second Annual Institutes for Executive Development, 1953-1954.** Washington, D. C.: Society for Personnel Administration, 1955. viii, 31 p.—This pamphlet outlines essential points on each of the following topics: (1) Why have executive development? (2) Fundamentals of executive development (3) Some pitfalls of executive development programming (4) Executive functions: as related to executive development (5) Executive ability: Fact and fiction (6) How to find executives (7) How to retain executives (8) How to create the climate for executive development (9) How to get top level support for executive development (10) How to develop executive talent (11) How to start a program and (12) The group appraisal method.—*V. M. Staudt.*

6715. Richey, Harold W., & Ratliff, Forrest R. (*Lackland AFB, Tex.*) **The prestige of Air Force career fields.** *USAF Person. Train. Res. Cent., Developm. Rep.*, 1956, No. AFPTRC-TN-56-78. 14 p.—This study investigated the existence of a prestige hierarchy of Air Force career fields and its similarity among airmen, NCO's and officer judges, and obtained positive results in both cases. Career fields with professional and semi-professional status and duties were rated highest; skilled, clerical and distribution functions were next; and semi-skilled and unskilled services were lowest. Implications with reference to job satisfaction require consideration.—*S. B. Sells.*

6716. Roy, Robert H. (*Johns Hopkins U., Baltimore, Md.*) **On operations analysis.** *Operat. Res.*, 1956, 4, 317-323.—"The ... paper deals with operations analysis as a special case of staff organization and sets forth the contrasts between this organizational relationship and the organizational relationship of other kinds of staff elements. The sources of hostility to operations analysis are examined and a means

for coping with these forces is discussed."—M. R. Marks.

6717. Roy, Robert H. (Johns Hopkins U., Baltimore, Md.) On staff organization. *Operat. Res.*, 1956, 4, 309-316.—"The . . . paper deals with the convention that staff organization is supposed to be advisory to line organization and examines the forces which tend to make staff organizations authoritative over subordinate line echelons. The reasons for this tendency are examined and the consequences of the growth of staff authority are analyzed."—M. R. Marks.

6718. Rüssel, Arnulf. Die Forschungsaufgaben der Arbeitspsychologie. (Research tasks of work psychology.) *Psychol. Rdsch.*, 1956, 7, 177-192.—Work psychology as distinguished from industrial psychology in general investigates the problems of the productive process at any level, manual as well as intellectual. Research has to be concerned with the following topics: The work process per se, the attitude of the worker toward his task, the relationship between worker, coworker and superior and the influence of a certain kind of work upon the personality of the worker.—W. J. Koppitz.

6719. Saupe, Joseph L. (Lowry AFB, Colo.) An analysis of trouble-shooting behavior of radio mechanic trainees. *USAF Person. Train. Res. Cent., Res. Rep.*, 1955, No. AFPTRC-TN-55-47, vi, 32 p.—This exploratory study of the nature and measurement of proficiency in electronic trouble shooting was based on the analysis of observational records of trouble-shooting performance of 40 Air Force radio mechanic trainees and written tests of basic electronics knowledge for this sample. Effective trouble shooters are able to perform a few general checks before starting on specific ones; they apply information obtained from checks, avoid redundancy, and use testing equipment properly. In contrast, the least successful tended to persist in areas shown to be working properly; they fail to make general checks before specific ones and showed by their behavior a lack of comprehension of the full significance of the component functioning they had observed.—S. B. Sells.

6720. Seymour, W. Douglas. Experiments on the acquisition of industrial skills. Part III. *Occup. Psychol.*, 1956, 30, 94-104.—In these experiments on the acquisition of skills on capstan operations, three methods are used and compared: a whole method; an isolation method, in which perceptually stringent elements are practised separately before attempting the whole task; and a progressive part method. It is concluded that the isolation and progressive part methods show results that are better than the whole method and that the speed of experienced workers is acquired with fewer repetitions by the isolation method. It is also suggested that the primary difficulty in acquiring speed skills on such industrial tasks lies in the perceptual rather than the motor field.—G. S. Spear.

6721. Shepherd, R. D., & Walker, J. Three-shift working and the distribution of absence. *Occup. Psychol.*, 1956, 30, 105-111.—Examination of absence records of three shift workers in a large iron and steel works showed that about three-quarters of the single shift absence without permission occurred on

the morning shift. Absence with permission was distributed more evenly over all three shifts. Careful examination of the records leads to the conclusion that the casual absence on the morning shift was largely unpremeditated and was due largely to the early morning start.—G. S. Spear.

6722. Smith, Patricia C., & Gold, Robert A. (Cornell U., Ithaca, N. Y.) Prediction of success from examination of performance during the training period. *J. appl. Psychol.*, 1956, 40, 83-86.—Production during early weeks of the learning period was correlated with average production after completing learning for a group of power sewing machine operators. In accordance with initial hypotheses, correlations are low during the first few weeks, rising steadily as the learning period progresses, but remaining lower than those obtained in studies using learning performance criteria rather than ultimate level of proficiency.—P. Ash.

6723. Sorensen, Clark C. Personnel administration. Cambridge, Mass.: Bellman Publishing Co., 1955. 18 p.—In this brief pamphlet the author reviews the history and development of personnel administration's various approaches to the personnel problem, the qualifications and training needed for a personnel director, opportunities in the field, and related considerations.—P. Ash.

6724. Williams, D. C. S. Effects of competition between groups in a training situation. *Occup. Psychol.*, 1956, 30, 85-93.—This experiment was designed to test the hypothesis that the introduction of competition between groups during training in relay adjusting would improve the quality and quantity of the work. It is concluded that the quantity was increased, but that there was no difference in the quality of the work.—G. S. Spear.

6725. Williams, Robert Edwin. A description of some executive abilities by means of the critical-incident technique. *Dissertation Abstr.*, 1956, 16, 1279.—Abstract.

(See also abstract 6044)

SELECTION & PLACEMENT

6726. Dvorak, Beatrice J. GATB in foreign countries. *J. appl. Psychol.*, 1956, 40, 197-200.—83 individuals and organizations in 28 foreign countries using the USES General Aptitude Test Battery are listed.—P. Ash.

6727. Eng, Bernhard, & Walther, Léon. Beitrag zur psychologischen Forschung über die Beziehungen zwischen der allgemeinen Intelligenz, der Fähigkeit zur Mechanik und der Handgeschicklichkeit. (Contribution to the psychological research of the relationship between general intelligence, mechanical ability and dexterity.) *Psychol. Rdsch.*, 1956, 7, 95-111.—3 test-batteries were used in this study: Meili's analytical intelligence-test, a battery testing mechanical ability consisting of the Rybakow-test, the form-relation-test, Yerke's cubes and the lever-test and a battery testing dexterity developed by Léon Walther. All together 1161 men were tested, 1039 with batteries 1 and 2, 122 men with batteries 1, 2 and 3. The correlations between these batteries make it clear, that an intelligence test alone is not

sufficient to select applicants for technical positions.—*W. J. Koppitz.*

6728. **Fleishman, Edwin A.** (Lackland AFB, Tex.) Predicting success in certain aircraft maintenance specialties by means of manipulative tests. *USAF Person. Train. Res. Cent., Res. Rep.*, 1955, No. AFPTRC-TN-55-23, vii, 30 p.—A battery of 16 experimental manipulative motor skills tests was investigated empirically for significant contribution to the present prediction of success in 3 enlisted specialties: Engine Mechanic, Hydraulic Mechanic and Aircraft Electrician, using final grades in technical school at Chanute AFB as criteria.—*S. B. Sells.*

6729. **Ghiselli, E. E.** (U. California, Berkeley), & **Barthol, R.** Role perceptions of successful and unsuccessful supervisors. *J. appl. Psychol.*, 1956, 40, 241-244.—The self-perceived role of first-line supervisors was compared with the role perceived by their superiors. 18 items (word pairs) differentiated between the "high" and "low" groups at the 5% level or better. "The most outstanding self-perception of the 'poor' supervisor is his sales approach to human relations . . . [while] . . . the 'good' supervisor . . . sees himself as respecting the rights and dignity of others." Conclusions are explored on the basis of the assumptions that (1) the self-perceptions are in approximate accord with the superiors' perceptions, and (2) the differences in self-perception reflect qualities that distinguish good from poor supervisors.—*P. Ash.*

6730. **Guthrie, Mearl R.** (Bowling Green State U., Ohio.) The measurement of personal factors related to success of office workers. *J. appl. Psychol.*, 1956, 40, 87-90.—The development of an instrument for use in evaluating the personal traits of office workers—the Office Workers Opinion Survey—is described. Successive item analyses yielded a questionnaire that gave a multiple correlation of .513 against 3 ratings (fellow workers, on-the-job supervisors, and office managers) for a group of 73 full-time office workers, and one of .572 for a group of 54 co-op business administration students.—*P. Ash.*

6731. **Heron, Alastair.** (Medical Research Council, London, Eng.) The effects of real-life motivation on questionnaire response. *J. appl. Psychol.*, 1956, 40, 65-68.—400 male omnibus conductor job applicants were given a 2-part personality measure (emotional maladjustment and sociability), 100 each under one of the following 4 conditions: before selection, paper-and-pencil administration; after being notified of selection, paper-and-pencil administration; a box-and-card administration under each of the 2 selection circumstances. The selection circumstances significantly affected the distribution of scores on the emotional maladjustment scale, but not on the sociability scale. Method of administration did not affect the score distributions.—*P. Ash.*

6732. **Imperial Chemical Industries Ltd.** (London, Eng.) Use of a selection panel in hiring non-technical people. *Personnel J.*, 1956, 35, 86-90; 102.—Eight young men aged 21-25 who have been pre-screened as potential candidates for development into department heads are brought together for two days to be assessed by a panel of five men from Central Staff Department and senior officials. After the panel agrees on the final ratings, the successful candidates

are seen again by the Recruitment Section to discuss the part of the company they might join.—*M. B. Mitchell.*

6733. **Mandell, Milton M.** Selecting and training employment interviewers. *Personnel*, 1956, 33, 42-48.—Much of the poor validity reported in studies of the interview may be attributed to poor interviewer quality. The first step in improving the interviewing level of an organization is to select those who have certain basic qualities. Next, the candidate must possess a variety of personal and experiential qualities which meet job and organizational requirements. Finally, he must proceed to an intensive training program. The desiderata of the candidate, his use and his training are described.—*D. G. Livingston.*

6734. **Roff, Merrill.** Preservice personality problems and subsequent adjustments to military service; gross outcome in relation to acceptance-rejection at induction and military service. *USAF Sch. Aviat. Med. Rep.*, 1956, No. 55-138, 17 p.—The object is to discover objective factors associated with predisposition to adult maladjustment, with particular reference to military service for application in selection procedures. Results based on 2,542 Minnesota cases reported indicated (1) that membership in a behavior problem group is significantly adverse with respect to subsequent military service, (2) but that, in terms of gross outcome, the majority of more refined analysis of predictors and criteria to be reported. A preliminary prediction study of gross outcome, based on global analysis of clinic case folders, resulted in a high degree of successful predictions.

6735. **Seaquist, Maurice R., Barry, John R., & Sells, S. B.** Adaptability screening of flying personnel; life history inquiry approach based on the personal history and background information questionnaire. *USAF School Aviat. Med. Rep.*, 1956, No. 56-45, 20 p.—A 492-item, life-history questionnaire was administered experimentally to 535 students entering primary pilot training at Graham Air Base, Florida. 11 a priori predictor keys were analyzed in relation to adaptability criteria and pass-fail, and 8 empirical keys were developed on an experimental sample and tested independently for validity. One 25-item a priori key, designated Aviation interests and attitudes, demonstrated consistent validity on 3 independent cadet samples and an officer sample. For the entire roster of 384 aviation cadets and 66 officers, for whom data were available, this key was found to predict success efficiently and to be generally independent of aptitude factors measured by the pilot stanine.

6736. **Tupes, Ernest C.** (Lackland AFB, Tex.) Development of a test battery for joint selection of AFROTC and AROTC cadets. *USAF Person. Train. Res. Cent., Res. Rep.*, 1955, No. AFPTRC-TN-55-41, vi, 29 p.—This study was designed to provide a valid test battery of leadership ability suitable for the screening of applicants for ROTC scholarships. An experimental battery of 13 predictor instruments was administered to nearly 2300 senior (Class of 1953) AFROTC and AROTC cadets at six colleges and data on two criterion measures (leadership ability and achievement in military science courses) were obtained.—*S. B. Sells.*

6737. **Weitz, Joseph.** Job expectancy and survival. *J. appl. Psychol.*, 1956, 40, 245-247.—On the

basis of a previous research finding that life insurance agents who said the manager misrepresented the job or job possibilities during the hiring interview were more likely to terminate, and those having a more realistic job concept were less likely to terminate, the effect of giving prospective agents realistic job descriptions was studied. "... giving prospective agents a realistic concept of the job and having this description come from an 'executive' source will reduce termination... [and]... will not make it more difficult to hire new agents."—P. Ash.

(See also abstracts 5530, 6071)

LABOR-MANAGEMENT RELATIONS

6738. Allen, V. L. The ethics of trade union leaders. *Brit. J. Sociol.*, 1956, 7, 314-336.—"Only in industry and in the organization of industrial trade unions is there a code of trade union behavior that is distinctive"; elsewhere codes show wide differences.—R. M. Frumkin.

6739. Anonymous. Les relations humaines dans l'entreprise vues par les organisateurs. (Human relations in business as seen by its organizers.) *Travail et Méth.*, 1956, 107, 16-20.—Five topics are considered: (1) the field of action of human relations; (2) approaches to the problem; (3) analyses of techniques and means; (4) communications in business; (5) the management of human relations in business. It was concluded that human problems are narrowly bound to all of the problems of management and of organization in business and, further, that certain of these problems are the particular domain of psychological specialists.—G. H. Mowbray.

6740. Brown, Julia. Union size as a function of intra-union conflict. *Hum. Relat.*, 1956, 9, 75-89.—The membership records of the International Ladies Garment Workers' Union were studied for the years 1900-1950. Five indices of conflict were developed: mortality rate of locals, leadership turnover, delegates challenged at meetings, constitutional reform demands, and proportion of jurisdictional disputes among locals. Pearson correlation coefficients by convention year between union size and each index were negative and ranged from -.40 to -.67; all were significant at the 5% level.—R. A. Littman.

6741. Burwen, Leroy S. (Chicago Tribune, Ill.) Campbell, Donald T., & Kidd, Jerry. The use of a sentence completion test in measuring attitudes toward superiors and subordinates. *J. appl. Psychol.*, 1956, 40, 248-250.—"A sentence-completion test designed to measure attitudes toward superiors and subordinates was administered to 312 Air Force cadets in advanced training. The test was scored with acceptable reliability, and showed a correlation of .32 with a direct attitude measure of the same dimension, and of .27 with an indirect measure based on an information test. Interpretation of these values is restricted due to a correlation of -.45 with a direct scale of alienation, and the absence of significant correlations with reputational criterion measures."—P. Ash.

6742. Ganguli, Harish Chandra. (Indian Institute of Technology, Kharagpur.) Attitudes of union and non-union employees in a Calcutta electrical engineering factory. *J. appl. Psychol.*, 1956, 40,

78-82.—A morale questionnaire yielding scores on 3 factors previously identified by factor analysis of the scale (satisfaction with benefits and with the organization, satisfaction with the formal aspects of supervision, and satisfaction with his supervisor) was administered to a sample of 548 workers in an electric appliance plant. On all 3 scales, the "Outside" union members were most dissatisfied, and the "Inside" union workers most satisfied. The unaffiliated group was in the middle.—P. Ash.

6743. Lloyd, John T., & Gray, Robert D. (Comps.) (Calif. Inst. Tech., Pasadena.) Supervision of scientific and engineering personnel. Pasadena, Calif.: California Institute of Technology, 1956. (Bull. No. 26.) vi, 82 p.—Subjects discussed include: characteristics and development of the professional employee, building and maintaining a good technical team, appraisal of performance, the supervisor's role in professional development, policies for salary administration, benefit plans, handling complaints and grievances, unionization of professional employees, communications, organization of a professional work group, and what professional workers expect of their supervisors.—E. G. Aiken.

6744. Mahoney, Gerald M. (U. Michigan, Ann Arbor.) Unidimensional scales for the measurement of morale in an industrial situation. *Hum. Relat.*, 1956, 9, 3-26.—Morale is postulated to be multidimensional. Nine unidimensional scales were devised to cover the multidimensional space proposed. Scale scores were correlated with two behavior measures, absence and supervisors ratings of energy and enthusiasm at work. Four scales had significant correlations with each behavior rating. The multiple correlation of the 9 scales with absence was greater than that for any of the scales taken individually, while this was not the case for the supervisors ratings. One scale, Feelings of Status in the Non-Work Situation, when combined with another, Evaluation of the Past, suggested a theoretical basis for absence. 27 references.—R. A. Littman.

6745. Stanley, John D. (U. Buffalo, N. Y.) Your informal organization: dealing with it successfully. *Personnel J.*, 1956, 35, 91-93, 102.—A check list is presented for reminding the manager of the power and influence of the informal organizations which may cause the company trouble if their existence is not recognized and taken into account when initiating personnel actions.—M. B. Mitchell.

6746. Tannenbaum, Arnold S. Mechanisms of control in local trade unions. *Brit. J. Sociol.*, 1956, 7, 306-313.—Describes aspects of the control process in local industrial type unions in Michigan and illustrates some of the means through which members may exercise control in their unions.—R. M. Frumkin.

6747. Wyatt, S., & Marriott, R. A study of attitudes to factory work. London, Eng.: Her Majesty's Stationery Office, 1956. vii, 115 p. \$1.80. (Med. Res. Coun., Spec. Rep. No. 292.) (Available from British Information Services, New York.)—"This report describes an investigation carried out in three large mass-production factories in England into the attitudes of the workers to two important aspects of their working life, the operation which they performed at the bench or the conveyor belt, and the system by which they were paid. . . . Since the aim

of the survey was to examine the causes of satisfaction and of discontent in factory communities and to determine the conditions which make for stability and working efficiency, it was necessary to investigate a wide range of topics and to obtain additional data from factory records and by means of supplementary interviews with charge-hands, supervisors, and shop-managers."—E. G. Aiken.

INDUSTRIAL AND OTHER APPLICATIONS

6748. Ackoff, Russell L. (*Case Inst. Tech., Cleveland, O.*) **The development of operations research as a science.** *Operat. Res.*, 1956, 4, 265-295.—The development of operations research as a science is given historical and bibliographic annotation within the framework of the phases of an OR project: formulating the problem (consumer and research problems); constructing and solving models (inventory, allocation, waiting-line, routing, replacement-renewal, information-collection, competitive and combined processes); deriving solutions from models; testing the model and solution; controlling the solution; implementation. 153-item bibliography.—M. R. Marks.

6749. Chauchard, Paul. **La fatigue.** (Fatigue.) Paris: Presses Universitaires de France, 1956. 128 p.—Fatigue is considered from a general point of view, excluding special aspects, the hygiene of sport or the physiology of work. The first part is concerned with normal, healthy fatigue, its multiple special aspects; then follows the pathology of fatigue, overwork, abnormal fatigability, the differentiation of nervous fatigue and neurotic difficulties. The last section is devoted to the struggle against fatigue, the problem of relaxation and rest, medical and psychophysiological measures and the prevention of fatigue by general hygiene and the organization of work.—G. Rubin-Rabson.

6750. Hepner, Harry Walker. **Psychology applied to life and work.** (3rd ed.) Englewood Cliffs, N. J.: Prentice-Hall, 1957. xv, 639 p. \$6.95.—This edition (see 16: 731) is considerably amplified and revised through incorporation of quite recent studies and writings. New material is most evident in Part Four on industrial psychology. A new chapter on group dynamics describes the effects on industrial human relations of such social variables as cohesiveness, participation, and group pressures. A new communications chapter describes both the formal and informal networks which go up, down, and across organization lines, all with potential effects on the psychological climate of the organization. A chapter on recent trends significant to industrial relations leaders presents research and prediction on the effects of increasing automation and labor mobility. Part Five on the consumer includes discussion on goals and methods of motivation research.—R. O. Peterson.

6751. Himler, Leonard E. **Psychiatric treatment; brief psychotherapy procedures for the industrial physician.** *Industr. Med. Surg.*, 1956, 25, 227-229.—This article discusses, for the benefit of the industrial physician, various approaches to the treatment of psychoneurotic reactions in industry.—(Courtesy of Rehab. Lit.)

6752. Jenkins, Thomas N. **The accident-prone personality; a preliminary study.** *Personnel*, 1956, 33, 29-32.—Although attempts to relate accident-

prone to sensory, motor and mental abilities have been fairly successful, relatively little has been done to identify and measure personality factors or behavioral tendencies associated with this problem. An effort has been made (using factor analysis and other methods) to remedy this deficiency, and the results may be classified into 7 trait patterns or syndromes. Each pattern is discussed. It is hoped that a practical test can be developed which will include measures of the 7 syndromes.—D. G. Livingston.

6753. Morrow, Robert Lee. **Motion economy and work measurement.** (2nd ed.) New York: Ronald Press Co., 1957. vi, 468 p. \$7.50.—This second edition of "Time study and motion economy" includes many new subjects, such as the application of motion economy to office work, complete coverage of micromotion study and the equipment used, the taking of motion pictures of operations and the analysis of the film for motion economies, and organization for methods improvement. The chapters on time study have been brought up to date where necessary, and motion time standards, sometimes called basic time standards, have been added. Work sampling, formerly called ratio delay, is fully covered, and there are examples of its many uses. New material on fatigue measurement has been included, and recent material on automatic machines and work assignments replaces the former coverage of these subjects."—E. G. Aiken.

6754. Vickery, Clement C. **Rehabilitation of the emotionally ill.** *Industr. Med. Surg.*, 1956, 25, 229-232.—This article discusses treatment of the mentally ill in the hospital setting, the handling of the return home and necessary treatment of members of the patient's family, patient-community interaction and its effect on the patient's recovery, and the role of the industrial physician in the rehabilitation of mental patients returned to the work situation.—(Courtesy of Rehab. Lit.)

INDUSTRY

6755. Churchill, A. V. **Comparison of two visual display presentations.** *J. appl. Psychol.*, 1956, 40, 135.—The applicability of the results of dial legibility studies based on slide presentations to legibility of actual dials was tested experimentally by comparison of time and error measures for reading actual dials, and reading slide projections of the dials. There was a slight but insignificant advantage in favor of panel-mounted slides over projection of pictures of the slides.—P. Ash.

6756. Davis, R. C. **Electromyographic factors in aircraft control. Muscular activity during steady noise and its relation to instructed responses evoked by auditory signals.** *USAF Sch. Aviat. Med. Rep.*, 1956, No. 55-124, 14 p.—Muscular activity during prolonged noise does not reveal evidence of adaptation, in contrast to the effects of a brief tone. Moreover, prolonged noise seems to inhibit rather than facilitate an instructed response.

6757. Fleishman, Edwin A., & Hempel, Walter E., Jr. **Factorial analysis of complex psychomotor performance and related skills.** *J. appl. Psychol.*, 1956, 40, 96-104.—A factor analysis of 23 test variables (16 apparatus psychomotor tests and 7 printed tests designed as possible substitutes for apparatus tests) and a flying training criterion is reported. 9

factors rotated to an orthogonal simple structure are described. There are certain broad group factors of psychomotor skill which may account for performance on a wide variety of different psychomotor tasks. Although some of the factors defined in psychomotor tests may also be sampled by printed tests, there is evidence that psychomotor tests sample some factors not covered by any other kinds of tests.—P. Ash.

6758. Foley, P. J., & Scott, D. M. **Legibility of Leroy digits as a function of size, distance, angle of view, and illumination level.** Toronto, Can.: Defence Research Board, Department of National Defence, 1957. (DRML Rep. No. 76-3.) vii, 7 p.—A study was made of the legibility of 12 sizes of digits drawn using the Leroy Standard Gothic Lettering Guides. Digit sizes ranged from .06 inches to .5 inches in height. 5 viewing distances were used, 2, 4, 8, 16, and 32 feet; 3 viewing angles at each distance, 45° right, normal, and 45° left; 3 conditions of illumination, 1, 10, and 50 foot-candles. Results are presented showing per cent of the population reading each digit size with 100% accuracy, at each viewing distance, from each viewing angle, and under each illumination level.

6759. Fox, Meyer S. **Occupational deafness.** *J. Amer. med. Ass.*, 1956, 162, 1273-1276.—A worker's hearing can be damaged temporarily or permanently by sufficiently loud occupational noise, whether explosive or continuous. Audiograms made before and during the course of employment are essential to a program of conservation hearing; they are also essential for medico-legal purposes.

6760. Graham, Norah E. (*Kings Coll., Newcastle upon Tyne, Eng.*) **The speed and accuracy of reading horizontal, vertical, and circular scales.** *J. appl. Psychol.*, 1956, 40, 228-232.—"The speed and accuracy of reading comparable horizontal, vertical, and circular scales has been studied by means of a film. . . . The vertical scale is clearly less easy to read than either of the other two displays, particular difficulty being experienced near its ends. The success of the circular scale may be attributed to the fact that it presents a smaller area to be scanned. The shape of the visual field and the relative ease of moving the eyes from side to side, rather than up and down, are thought to account for the greater accuracy on the horizontal scale."—P. Ash.

6761. Hall, Norman B., Jr. **Internal relations of elemental motions within a task.** *J. appl. Psychol.*, 1956, 40, 91-95.—For micro-motion samples of an industrial operation (taken 8 times a day for 5 days) average times of individual elements were correlated. "If production is to remain constant, variations in time of the individual elements must be and are compensated for by either an increase or decrease in the time of the other elements which compose the cycle. . . . The results . . . provide evidence that the elements are related. The removal of one because of its undesirability may well be reflected in other elements. An atomistic concept of human behavior appears to ignore too much when considering motion economy."—P. Ash.

6762. Hecker, Donald; Green, Donovan, & Smith, Karl U. (*U. Wisconsin, Madison.*) **Dimensional analysis of motion: X. Experimental evaluation of a time-study problem.** *J. appl. Psychol.*,

1956, 40, 220-227.—"The results show that the duration of a travel movement of fixed length may change as much as 50 per cent when it is associated with different forms of manipulation. Furthermore, the degree to which this travel movement changes during learning depends on the type of manipulative movement with which it is related. The results are discussed in relation to industrial time-and-motion study and in terms of their bearing on the general problem of integration of the component movements in motion."—P. Ash.

6763. Huiskamp, Janet; Smader, Robert C., & Smith, K. U. (*U. Wisconsin, Madison.*) **Dimensional analysis of motion: IX. Comparison of visual and nonvisual control of component movements.** *J. appl. Psychol.*, 1956, 40, 181-186.—Twelve Ss practiced a knob-turning control panel task while blindfolded, and another 12 without blindfolds. A final set of trials was run in which the visual conditions were reversed for the Ss. Time of travel (hand movement) to reach the knobs, and time of manipulation, were recorded electronically. For both components, the non-blindfold group did better; practice did not compensate for loss of vision.—P. Ash.

6764. Jacobs, Herbert H. (*Columbia U., New York.*) **Operational aspects of the accident proneness concept.** *Trans. N. Y. Acad. Sci.*, 1956, 18, 261-265.—The Pearson type III model of accident expectations combined with behavioral stability and an absence of accident learning was tested against a large sample of accident data. The results seemed to offer "considerable substantiation to the accident-proneness concept in general" and to the behavioral model tested. As a cautionary note, data relating to the selection gain-cost relationship "strongly suggests the possibility that proneness research may have much less promise in terms of potential application than other forms of accident research."—P. Swartz.

6765. Kershner, Alan M. **A report on job analysis.** Washington, D. C.: Office of Naval Research, Department of the Navy, 1955. iii, 72 p.—A critical review of job analysis is presented. The specific topics covered include purposes for which job analysis is used; some definitions of job analysis and job analysis terms; methods of job analysis; research on job analysis methods; some recent studies employing job analysis procedures; studies concerned with job evaluation; other studies employing factor analysis methods; general discussion, and a discussion of recent trends and conclusions. 79-item bibliography.—V. M. Staudt.

6766. Kurke, Martin I. (*Aberdeen Proving Ground, Md.*) **Evaluation of a display incorporating quantitative and check-reading characteristics.** *J. appl. Psychol.*, 1956, 40, 233-236.—It was demonstrated that the conventional method of red lining a dial to indicate a deviation from 'safe and normal' operation is significantly better than no 'red-line' indication at all provided the criteria are errors, or reading time isolated from associated motor activity. It was also demonstrated that the experimental dial design principle is significantly more efficient than the other two.—P. Ash.

6767. Larson, John C., et al. **The human element in industrial accident prevention.** New York: New York University, Division of General Educa-

tion, Center for Safety Education, 1955. 114 p.—Research on the relationship of human factors to the causes of industrial accidents is analyzed and interpreted. There are 8 chapters under such topics as psychological and sociological characteristics, training programs and accident prevention, morale and job satisfaction, and predicting accidents. Each chapter contains a synopsis and a discussion of research findings. It is concluded that the majority of potential accident risks can be detected during pre-employment procedures through tests, job history, biographical data, and evidence of poor adjustment or personality defects. However, adjustment to the new job is influential in determining future performance so that training, safety conditions, and a friendly, cooperative working atmosphere are conducive to higher production, greater efficiency, and lowered accident and injury rates. Glossary. Approximately 250 references.—C. G. Browne.

6768. Lewis, R. E. F., & Humphries, M. **Measurement of pilot behaviour: comparison of day and night approach and landing techniques.** Toronto, Can.: Defence Research Board, Department of National Defence, n. d. vii, 12 p.—“A flight recorder developed by the National Aeronautical Establishment was installed in an RCN Avenger aircraft from HMCS ‘SHEARWATER.’ 8 pilots each made 10 normal landings by day and by night. The results indicated that these pilots approach slower and lower, and land harder and shorter by night than by day.”—E. G. Aiken.

6769. Lincoln, Robert S., & Averbach, Emanuel. (Johns Hopkins U., Baltimore, Md.) **Spatial factors in check reading of dial groups.** *J. appl. Psychol.*, 1956, 40, 105-108.—“Observers were required to detect deviant pointers within a display panel of 16 circular dials . . . the spatial locations of the deviant pointers within a panel were controlled in such a way that it was possible to determine the percentage of deviations detected as a function of quadrant location and position within quadrants. The consistency of these spatial effects was determined over 3 durations of panel exposure. The results showed that spatial location was an important determinant of the number of detections that were made. The pattern of detections that appeared seems to confirm the idea that the scanning habits which observers use are highly related to previously learned reading habits.”—P. Ash.

6770. Littauer, Sebastian B. (Columbia U., New York.) **The application of statistical control techniques to the study of industrial and military accidents.** *Trans. N. Y. Acad. Sci.*, 1956, 18, 272-277.—The purpose of the study reported was “to determine the effectiveness of statistical control methods in the analysis and control of industrial accident frequencies.” Detailed data were collected in a variety of manufacturing establishments in both urban and rural centers. Among other things, it was concluded that: (1) The statistical control methods used can reduce industrial accident frequency. (2) The study revealed “two marked increases in accident rate whose occurrence are attributable to one or more . . . assignable causes.”—P. Swartz.

6771. McNaughton, J. Bruce. **Work sampling at executive level.** *Advanced Mgmt*, 1956, 21(10), 12-13.—Defines sampling theory and practice as ap-

plicable to executive activity. Lists 3 general steps to follow and discuss advantages and pitfalls. Illustrates through a practical situation.—A. A. Canfield.

6772. Miles, E. E., & Peach, D. C. (General Electric Co., Ltd., Wembley, Eng.) **Light sources for colour matching.** *Trans. Illum. Engng Soc. Lond.*, 1956, 21, 135-147.—“Visual comparison of the colour of an article with a colour standard forms the basis of colour control in many industries. While the colour of the sample and the standard will only be a true match if their spectral reflectance characteristics are identical, this is not always practicable and the problem facing the colourist is to obtain the best match under the widest range of illuminants.”—R. W. Burnham.

6773. Mintz, Alexander. (City Coll. New York.) **A methodological note on time intervals between consecutive accidents.** *J. appl. Psychol.*, 1956, 40, 189-191.—It is pointed out that in the theoretical distribution of time intervals between consecutive accidents, short time intervals are much more frequent than long ones. An excess of short time intervals over long intervals between accidents is not itself, therefore, evidence of accident proneness. It must be shown that the excess is greater than that given by the theoretical distribution.—P. Ash.

6774. Payne, R. B., & Moore, W. E. (USAF Sch. Av. Med., Randolph Field, Tex.) **The effects of some analeptic and depressant drugs upon tracking behavior.** *J. Pharmacol.*, 1956, 115, 480-484.—The effect of performance in a multidimensional tracking task of three analeptic drugs (d-amphetamine, mephentermine, and pipradol) was compared with placebo controls and various motion-sickness remedies. For the three analeptics, performance was superior to the controls. Performance on the task was statistically indistinguishable from the controls for three neutral remedies (cyclyzine, promethazine, and meclizine), and was inferior to the controls after administration of a scopolamine-diphenhydramine mixture.—G. A. Heise.

6775. Riopelle, Arthur J. **Accustomization and indoctrination studies relating to cold weather living and the use of quartermaster clothing and equipment.** *US Army Qm. Res. Develpm. Cent. environ. protection Div. Tech. Rep.*, 1956, No. EP-32, v, 76 p.—This report describes the development and application of a cold weather information survey which was designed to evaluate the soldiers' knowledge of correct principles and practices of cold weather living. Emphasis is placed on those concepts which deal primarily with Quartermaster items of issue. Several experiments were performed in order to determine the effectiveness of various aspects of military experience.

6776. Roche, M. (Laboratoire de la Prévention Routière, Paris, France.) **Remarques sur les aspects psychophysiologiques des accidents de la circulation.** (Remarks on the psychophysiological aspects of traffic accidents.) *Rev. Psychol. appl.*, 1956, 6, 29-34.—Two problems are receiving the attention of psychologists dealing with accident prevention: (1) The treatment of people poorly adapted to driving and who have abnormally frequent accidents; and (2) the development of teaching methods for the more rational training of drivers. The prin-

ciples involved in these are the same. Research aimed at concrete and practical understanding of very varied human situations will enable proposals to be made for helping drivers to improve themselves.—*W. W. Wattenberg.*

6777. Rupe, Jesse C., & Westen, Risdon J. (Chanute AFB, Ill.) **Research into basic methods and techniques of Air Force job analysis—II.** *USAF Person. Train. Res. Cent., Res. Rep.*, 1955, No. AFPTRC-TN-55-51, viii, 69 p.—This is the second of 4 reports of a study comparing 5 techniques of job analysis: (1) questionnaire-survey (mail), (2) group interview, (3) individual interview, (4) observation interview, and (5) technical conference. The previous report (see 28: 3423) compared these techniques on 4 relatively simple jobs; the present concerns 4 technically complex jobs. Although there were only small differences among methods 5, 4 and 3 in information obtained, they were ranked consistently, in the order shown on this criterion and also on cost in man-hours. The questionnaire method was least expensive. These findings parallel the first block of jobs studied.—*S. B. Sells.*

6778. Schreiber, Robert J. (Dunlap and Associates, Inc., Stamford, Conn.) **The development of engineering techniques for the evaluation of safety programs.** *Trans. N. Y. Acad. Sci.*, 1956, 18, 266-271.—The purpose of the study reported was to develop a method of evaluating the effectiveness of educational methods on the reduction of accidents "in terms of some measurable quantity whose statistical characteristics are known." A change in behavior rather than accidents was used as the criterion of effectiveness. Using the Shewhart control chart type of analysis 5 applications were made. "All indications are that the control chart technique fulfills the requirements for the statistical analysis of the behavioral data."—*P. Swartz.*

6779. Scott, D. M. **Visibility on radar screens: centred versus offcentred operation.** Toronto, Can.: Department of National Defence, Defence Research Medical Laboratories, 1957. iii, 6 p.—"When Plan Position Indicator radar scopes are offcentred in order to share surveillance area responsibility, is visibility of targets [pips] improved or impaired?" N=40 trained subjects. "Subjects were required to look in one of three one-inch squares . . . on the tube face and report on a 'seen,' 'not-seen' basis each time the sweep-line passed through the appropriate square. Brightness of the target was increased on each 'not-seen' report until the subject reported 'seen.'" "It was found that centred scopes are significantly superior."—*T. Shipley.*

6780. Simon, Charles W., & Roscoe, Stanley N. **Altimetry studies: II. A comparison of integrated versus separated, linear versus circular, and spatial versus numerical displays.** Culver City, Calif.: Hughes Aircraft Co., Weapons Systems Development Laboratory, 1956. iii, 8 p. (Tech. Memo. 435.)—Tested "effects of three variables upon pilot performance in making the routine decisions required to follow vertical flight commands" proved "integrated vertical linear-scale display . . . superior to the integrated circular-scale display." Additional results are reported.—*R. Tyson.*

6781. Tiffin, Joseph, & Prevratil, Weld. (Purdue U., Lafayette, Ind.) **Industrial psychology in the aircraft industry.** *Amer. Psychologist*, 1956, 11, 246-248.—"The objectives of the present study were to get an indication of (a) the degree to which industrial psychologists and their activities have been accepted in the aircraft industry and (b) some of the factors related to this acceptance." "A questionnaire was mailed to 160 personnel executives in plants manufacturing products for the aircraft industry." Inferences are drawn regarding evolving trends, and inferences are drawn which "can be generalized to all the plants in the industry."—*S. J. Lachman.*

6782. **USAF School of Aviation Medicine. Subject-index of School of Aviation Medicine research reports: January 1942-December 1956.** Randolph AFB, Tex.: Author, n. d. iv, 72 p.—Indexes the research reports published by the School of Aviation Medicine from 1942 through 1956. Subject headings have been arranged by major field of interest and are shown by the centered headings. Under each field of interest there are several subheadings as indicated in the Table of Contents. Cross references have been made to other fields or subheadings. Supplements are published semiannually.

6783. **U. S. Naval School of Aviation Medicine. Research notes from the Aviation Psychology Laboratory.** U. S. Naval Sch. Aviat. Med. Res. Rep., 1955, Nos. NM 001 101 105.02; NM 001 108 100.07, 100.08, 100.09, 100.10, 102.02, 108.01, 109.01, 109.02, 109.03; NM 001 109 100.08, 101.05, 107.01, iii, 57 p.—This series of short papers includes Ambler, Rosalie K. The Aviation Qualification Test as a predictor of the pre-flight academic final grade; Bair, John T., & Ambler, Rosalie K. Attrition data as a criterion: III. Medical attritions with anxiety symptoms; deRivera, Joseph H., & Webb, Wilse B. Correlations between dynamic visual acuity and personality tests; Hall, Arthur L., & Maag, Clinton H. Evaluation of an instrumental conditioning procedure as an index of auditory decrement in the white rat; Jones, Marshall B. The generalization of the California PEC Scale; Jones, Marshall B., & Manhold, John H. Authoritarianism and physical fitness; Lockman, Robert F. A canonical analysis of naval aviation cadet criterion group differences; Lockman, Robert F. A graphic method for determining the mean difference required for significance in biserial item analysis; Manhold, John H., & Jones Marshall B. Authoritarianism and dental caries; Voas, Robert B. The effect of non-scored items and retesting on the Taylor Manifest Anxiety Scale; Voas, Robert B. The reliability of self-determinations of pulse rates; Voas, Robert B. A rapid method for scoring the Gladstone group palmar sweat test; Webb, Wilse B. An analysis of the reliability and validity of 'voting behavior' compared with individual judgments.

6784. **U. S. Navy. Office of Naval Research. Special Devices Center. Bibliography of human engineering reports (unclassified).** Port Washington, N. Y.: Author, 1956. 18 p.—For each report the following information is given: author, title, date of issue, security classification and number. Reports are arranged under the 10 subject headings: learning, motor skills, perception, voice communications, systems analysis, controls and displays, training devices, research tools, and human engineering.

6785. Webb, Wilse B. The prediction of aircraft accidents from pilot-centered measures. *J. Aviat. Med.*, 1956, 27, 141-147.—A review of recent studies indicates that selection and elimination of individuals who are going to have accidents is not possible on the basis of existing aptitude or performance measures nor on the basis of aircraft accident histories. Some accidents are held to be unpredictable from individual measures since they result from conditions to which the person cannot respond adequately. Other accidents are suggested to be the result of "states of readiness," and determination of the extent to which these enter into accidents and to what extent such states are predictable is a major problem.—J. M. Vanderplas.

(See also abstracts 5468, 5895, 6334)

BUSINESS & COMMERCE

6786. Enneis, William Howard, Jr. Effect of machines, tasks, and tiredness feelings on various measures of output curves of typists. *Dissertation Abstr.*, 1956, 16, 1276.—Abstract.

6787. Kraushar, Carl. Characteristics and duties required of cooperative secondary school students in selected retail stores. *Dissertation Abstr.*, 1956, 16, 1401.—Abstract.

6788. Spires, Alan M., & LeBlanc, A. G. The relative effectiveness of absolute size in advertisements: a pilot study. *Bull. Marit. psychol. Ass.*, 1956, 5, 16-20.—The relative attentional values of differently sized full page advertisements are compared. Two dummy magazines, containing 18 common advertisements in color and in black and white and identical in every detail save that of size, were shown to college students. From tests of recall and

recognition, the authors conclude that "... the attentional value of magazine advertisement is independent of absolute magnitude."—A. E. Harriman.

PROFESSIONS

6789. Bridgman, Charles S. (U. Wisconsin, Madison.) The optometrist and psychological factors in visual work. *Amer. J. Optom.*, 1956, 33, 341-352. Various psychological aspects of the optometrist's task are discussed. The author cites an instance from personal experience where a psychologically wiser refractionist was very much in need. Optometrists may benefit from a wider reading in the psychological literature, but should avoid entering into formal counseling relationships.—T. Shipley.

6790. Pospisil, Leopold J. (Yale U., New Haven, Conn.) The nature of law. *Trans. N. Y. Acad. Sci.*, 1956, 18, 746-755.—A theory of law is presented, one with "cross-cultural applicability, formulated on the basis of a comparative study of 32 cultures and tested in the Kapauku Papuan society." The author conceives of law as a "functional, rather than as a contentual and descriptive concept." The pattern of criteria that define a phenomenon as law includes: (1) "the criterion of authority," (2) "the criterion of intention of universal application," (3) "the criterion of obligation," and (4) "the criterion of sanction." As identified by these criteria law "is present not only on the society level but also in its subgroups, so long as they are functioning units." There are as many legal systems in a society as there are functioning groups. Also discussed are legal dynamics and the relativity of law.—P. Stewart.

(See also abstract 6009)

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